MEMOIRS

OF THE

MEDICAL SOCIETY

OF

LONDON,

INSTITUTED IN THE YEAR 1773.

VOL. VI.

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1805.

PREFACE.

IN a ſcientific age, when medicine is cultivated in the moſt liberal manner, it might be preſumed, that a Society happily inſtituted for the purpoſes of promoting medical knowledge, would meet with ſupport and countenance adequate to the attainment of theſe important objects. In proof of which, we are enabled to remark, that the Members of the Society are nearly doubled in number, ſince the publication of the laſt volume of its Memoirs.

It will not be deemed that the communications read at the Meetings of the Society, and the practical diſcuſſions that are offered, although highly important, conſtitute the ſole advantages which its members, and ultimately the public derive, when it is conſidered, that the library in poſſeſſion of the Society, con-

tains upwards of ten thoufand volumes, many of them of fingular rarity and value, which are always acceffible to its Members.

The Society, ever anxious to record hiftories of epidemic, contagious and popular difeafes, took an early and active intereft in collecting and preferving materials for elucidating the hiftory of the late Influenza; which it was enabled more extenfively to do, in confequence of the indulgence granted by the Poft-Mafters General, and the polite affiftance of Mr. Freeling Secretary of the Poft-office, to allow the Effays fent to the Society on this fubject to pafs free of poftage, which the Society cannot but gratefully acknowledge; and at the fame time, truft, that the great body of ufeful information thus collected will amply repay to the public any deduction occafioned by this liberal facrifice.

The Society, continually zealous to enlarge the field of Medical Science in every direction, have perfevered in rewarding genius, by conferring Medals on the Authors, whofe Communications have been judged the moft meritorious.

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In the Year 1801.

To Dr. Bouttatz, for his Paper on the Medicinal effects of Phosphorus. *The Fothergillian Gold Medal.*

To Dr. Joseph Adams, for his Paper on Frambroesia Guineaensis, A Silver Medal.

1802.

To Dr. Falconer of Bath, for his Paper on Ischias, A Silver Medal.

1804.

To Dr. Edward Jenner, A Gold Medal, for his invaluable Discovery of vaccine Inoculation, made when he was a Member of no other literary Society.

1805.

To Dr. Bostock, for his Paper on Diabetes, A Silver Medal.

Further to promote the exertions of genius, and more extensively to call forth abilities, which otherwise might remain dormant, the President has liberally proposed to present Medals, according to regulations mentioned in Article LXXXIII. Page 618.

The Society likewiſe propoſe to confer the FOTHERGILLIAN GOLD MEDAL, upon the Authors of the beſt Eſſays, on the following Subjects:

Queſtion for the Year 1806.

What are the diſorders that have been miſtaken for ſyphilis, and how are they to be diſtinguiſhed from it?

For the Year 1807.

The beſt account of the epidemic fevers, which have prevailed at various times in North America, Spain, and Gibraltar, ſince the year 1793, and whether they are the ſame or different diſeaſes?

For the Year 1808.

What are the beſt methods of preventing and of curing epidemic dyſentery?

For the Year 1809.

What are the criteria by which epidemic diſorders that are not infectious, may be diſtinguiſhed from thoſe that are?

For the Year 1810.

What are the qualities in the atmoſphere moſt to be deſired under the various circumſtances of pulmonary conſumption.

REGULATIONS *respecting the Medals.*

1. Each Dissertation shall be delivered to the Secretary, in the Latin, English, or French Language, on or before the first Day of November, in each preceding year, except the Paper in reply to the first question which will be received any time before December 31, 1805.

2. With each Dissertation shall be delivered a sealed Packet with some Motto or Device on the outside; and within, the Author's Name and Designation; and the same Motto or Device shall be put upon the Dissertation, that the Society may know how to address the successful Candidate.

3. No Paper with the Name of the Author affixed can be received; and if the Author of any Paper shall discover himself to the Council, or to any Member thereof, such Paper shall be excluded from all competition for the Medal.

4. All Dissertations, the successful one excepted, shall be returned, if desired, with the sealed Packets unopened.

The Society continues to offer two Silver Medals annually; one to the Author of the beſt Eſſay, read before the Society within the year, by a Fellow, that is, any Member who reſides within ſeven miles of London; the ſecond, to the beſt Eſſay by any other perſon.

We cannot conclude without expreſſing the ſatisfaction we feel, in experiencing the high reputation, which the Society has extenſively acquired; and gratefully acknowledging the politeneſs of many ſcientific bodies, in preſenting to it their own learned works; at the requeſt of the Royal College of Medicine of Berlin, the propoſitions they have tranſmitted to the Society, are inſerted as the ſubject is highly intereſting to the world at large.

A LIST OF THE PRESENT OFFICERS OF THE MEDICAL SOCIETY OF LONDON,

To any of whom Communications may be addreſſed.

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ERRATA.

Page 318, l. 14, *for* ſpring 1802, *read* ſpring 1782.
122, l. 5, *for* F.M.S. *read* C.M.S.
318, l. 1, *for* XXIV. *read* XXIX.
l. 1, *for* p. 144, *read* 441.
514, l. 2 *for* LX, *read* LXV.
517, l. 2, *for* LXI, *read* LXVI.
527, l. 2, *for* LXII, *read* LXVI *.
533, l. 4, *for* Almsford, *read* Alresford,

ME-

MEMOIRS, &c.

ARTICLE I.

Sketch of the similarity of Ancient to Modern Opinions and Practice concerning the MORBUS CARDIACUS.

BY WILL. FALCONER, M.D. F.R.S. *&c.*

Read OCTOBER 16, 1786.

INTRODUCTION.

IT is a curious, and not uninstructive speculation, to survey the revolution of medical opinions. What the Poet says of the husbandman and of the seasons, is almost equally applicable to a series of theories in Medicine,

> ——redit——labor actus in orbem,
> Atque in se, sua per vestigia, volvitur annus.
>
> VIRG. *Georgic.*

During the whole of the last century, and a part of the present, the use of opiates* and

* Vide Mortoni Methodum curandi Febrem continuam rationalem, vol. i. p. 335.

wine in feverifh diforders was very common, and particularly in fuch as were efteemed to be, in the language of thofe times, of a *malignant* quality or difpofition. This practice was gradually laid afide, and the ufe of neutral falts, and other cooling medicines introduced. It was, however, foon difcovered, that this new mode of practice would not fuit every cafe that came under the denomination of fever. The late juftly celebrated Dr. Fothergill was among the firft who pointed out, not its inefficacy only, but its mifchievous effects alfo, in the ulcerated fore-throat, a fever evidently of a malignant nature. Wine and cordials were again reforted to, and with fuccefs. At prefent the ancient practice is ftill farther revived, and opiates as well as wine, are fuccefsfully adminiftered. There is, I think, reafon to believe, that all thefe changes were made from obfervation of the bad effects of the practice immediately preceding, and I apprehend with reafon. How then fhall we account for the revival of a practice which experience had fhewn to be unfuccefsful? It appears to me, that this may be explained upon the following principles. The caufe of diforders of the above-mentioned kind,

kind, was, at that time, imagined to confift in the prefence of fome noxious fubftance or humour, the feat of which was principally in the animal fluids. This was thought neceffary to be expelled, and the obfervation, that many flight fevers had a kind of natural termination by perfpiration, caufed this difcharge to be deemed the moft eligible method of carrying off what, in their judgment, was the caufe of the difeafe. Opium therefore, wine, and other cordial medicines, were not adminiftered fo much with a view to invigorate the fyftem, and to fupport the fpirits, as with an expectation of their acting as fudorifics, and by that means evacuating the offending, or, as it was then termed, *peccant* matter. This intention they endeavoured to fecond by the application of external heat. Large fires in the chambers of the fick, heavy bed-clothes, and many attendants affembled there, together with a ftudious attention to exclude the fmalleft ingrefs of frefh air, were all meant to contribute to this purpofe.

Experience however of the ill-fuccefs of this practice, opened at laft the eyes of the medical faculty, and indeed of mankind in general. It was therefore changed; but inftead of being

ſubjected to a candid examination, which might have determined what parts of it were exceptionable, and what proper to be retained, it was diſcarded altogether.

This indiſcriminate rejection has, I apprehend, contributed to poſtpone conſiderably the knowledge of a moſt uſeful remedy. The exhibition of opiates is not, more than that of wine, neceſſarily connected with the application of external heat. The ancient phyſicians employed both the above remedies in ſuch caſes, and accompanied them with the ſtrongeſt recommendation of coolneſs of temperature, and the admiſſion of freſh air, and in all probability their practice was for * the moſt part ſucceſsful.

The revival of theſe remedies in the preſent age, may ſuggeſt an uſeful caution to medical practitioners againſt a general and precipitate alteration in every part of any mode of practice that has been of long ſtanding.

General ſyſtems of practice that have been long in uſe, are ſeldom wrong in every point; they have probably been, in a good meaſure,

* See a paſſage from Aretæus, quoted in the latter part of this Paper, under the account of the mode in which the Morbus Cardiacus terminates.

the

the reſult of experience; and if, in ſome inſtances, they have been carried to too great a length, or miſdirected by erroneous opinions or fanciful analogies, we may curtail their extravagancies, and correct their miſtakes, and retain notwithſtanding ſomething uſeful. We have ſeen the uſe of wine and opium condemned in diſorders wherein the lateſt experience has ſhewn them to be efficacious remedies; and we have reaſon to think, that this prejudice aroſe in a great meaſure from their having been formerly uſed in conjunction with a regimen with which they had only a caſual connection, founded on a miſtaken theory. The father of phyſick has cautioned us againſt precipitate deciſions of every kind, by declaring, that "judgment is difficult, as well as "experiment is hazardous."

Comparifon between the ancient and modern Defcriptions, and Method of Cure, of the MORBUS CARDIACUS, or NERVOUS FEVER.

Ancient Names of the Difeafe.	*Modern Names of the Difeafe.*
Νοσος καρδιακος. *Aretæi et Galeni.*	Slow nervous fever. *Huxham.*
Morbus Cardiacus. *Celfi, Plinii et Cælii Aureliani.*	Febris lenta vel nervofa. *Home.*
	Typhus nervofus. *Sauvage.*
	Typhus mitior. *Cullen.*
	Low fever. *Wall.*
Defcription and Symptoms of the Difeafe, according to the ancient Writers.	*Defcription and Symptoms of the Difeafe, according to the Moderns.*
A difpofition to the Morbus Cardiacus is indicated by a diminution of the natural ftrength, and by lownefs of fpirits *. *Galeni Finitiones Medicæ.*	Liftleffnefs and general wearinefs, like what is felt after great fatigue. *Huxham on Fevers*, cap. vii.
	Liftleffnefs. *Wall*, p. 3.
	Unufual fatigue after motion or exercife. † *Home*, part ii. § 2. *Princ. Med.*
Loathing of food. *Cælii Aurelian.* lib. ii. c. xxxii.	Naufea and difrelifh of every food. *Huxham*, cap. vii.
	Loathing of food, naufea. *Wall*, p. 4.

* Cardiaca difpofitio eft innati roboris labefactatio & languor. N. B. The Latin tranflation of Galen, printed at Venice, apud Juntas, A D. 1565, is referred to in this work.

† Inufitatâ laffitudine poft motum.

Defpondency

Deſpondency of mind. Involuntary tears. *Cœlii Aurel. Ibid.*	Heavineſs and dejection of ſpirits *Huxham*, cap. vii. Dejection of ſpirits, anxiety, agitation, moaning. *Wall*, p. 4. Dejection of ſpirits, involuntary groans, terror of mind. *Home, Ibid.*
Tremulous voice. *Cœlii Aurel. Ibid.*	Speech very inarticulate and ſcarcely intelligible. *Huxham, Ibid.*
Pale countenance. *Cœlii Aurel. Ibid.* Hollow eyes. *Cœlii Aurel. Ibid.*	Countenance dead coloured. *Huxham, Ibid.*
Reſpiration ſhort, difficult and laborious. *Cœlii Aurel. Ibid.*	Reſpiration laborious, and interrupted with ſighing or ſobbing. *Huxh. Ibid.* Oppreſſion of the parts about the heart, and difficulty of reſpiration. *Home, Ibid.*
Great weakneſs of body. *Celſ.* lib. iii. cap. xix.	Weakneſs and tremor of the hands, and general muſcular debility. *Wall*, p. 4. Great proſtration of ſtrength. *Home, Ibid.*
Tongue ſometimes moiſt, at others deſtitute of its natural moiſture, and dry. *Cœl. Aur.* lib. ii. cap. 32. In ſome inſtance the tongue is found rough and	The tongue at the beginning is ſeldom or never dry or diſcoloured, but ſometimes covered with a thin whitiſh mucus; at length, indeed, it appears very dry.

dry. *Cœl. Aur.* lib. ii. cap. 33.	dry, red, and chapped. *Huxham.*
Tongue rough, dry, and dark coloured. *Aretæus on the Cure of acute Disorders,* lib. ii. cap. 3.	Tongue at firſt white afterwards brown. *Wall.*
Want of ſleep. *Aretæus Ibid.*	The patient is commonly quite void of ſleep. *Huxh.*
Little ſleep. *Cœl. Aur.* lib. ii. cap. 32.	No real ſleep. *Wall.*
Conſtant watchings. *Cœl. Aur.* lib. ii. cap. 32.	A ſtate of waking very much reſembling ſleep. *Home.*
In ſome a ſweat comes on, that is ſuddenly collected upon the ſurface of the whole body. In ſome caſes this is at firſt, only upon the face and neck, when it is ſmall in quantity, thin and watery. From thence it ſpreads over the whole body, and then is profuſe, thick, glutinous, viſcid, and of an ill ſmell, reſembling the waſhings of fleſh meat. *Cœl. Aur.* lib ii. cap. 32.	Frequently profuſe ſweats pour forth all at once, about the 9th, 10th, or 12th day, commonly coldiſh and clammy on the extremities. *Huxham.*
Immoderate ſweats. *Celſ. Ibid.*	Profuſe ſweats. *Home.*
Immoderate ſweats. *Galen.*	
Profuſe ſweats. *Aretæus.*	
Sweats on the face and breaſt. *Ætii,* 438.	

Urine

Urine pale and watery, with white clouds. * *Galen de Dynamidiis.*	The urine is commonly pale, and often limpid; frequently of a whey colour, or like vapid ſmall beer, in which there is either no manner of ſediment, or a kind of looſe matter, like bran, irregularly ſcattered up and down in it. *Huxham.* The urine was almoſt limpid. *Wall.*
No great increaſe of heat, but rather a diminution of it in different parts of the body. † *Cæl. Aur.* A coldneſs and inſenſibility of the knees, elbows, and legs. ‡ *Cæl. Aur.* ‖ *Ætii,* 438. A heat of the Inteſtines, as it were from fire, whilſt the extremities are cold; the hands and extreme parts of the feet are very cold. § *Aretæus.*	The heats and chills are uncertain and unequal. *Huxham.* No great heat. *Home.* A high colour and heat in the face, whilſt the extremities are quite cold. *Huxham.*
Pulſe very ſmall, frequent and tremulous. ** *Aretæus.*	The pulſe quick, weak, and unequal; ſometimes for

* Urina alba et aquoſa cum nebulis albis.

† Neque fervor plurimus, ſed magis in aliis parvus corporis partibus.

‡ Genuum gelidus ſtupor, et cubitorum, et tibiarum.

‖ Extremarum partium frigiditas.

§ Θερμασιη των σπλαγχνων οκως απο πυρος, ψυχρα δε τα εξω· Χειρες δε και ποδες ακροι ψυχρολατοι.

** Σφυγμοι σμικροι, πυκνολατοι, τρομωδεες.

Pulſe

Pulſe very ſmall and weak. **Celſus.*

Pulſe quick, frequent and low. †*Cæl. Aurel.* ‡*Æt. p.* 435.

Pulſe frequent, quick, ſmall, weak, and, as it were flowing. In the progreſs of the diſeaſe it becomes ſunk, obſcure, tremulous, creeping, and at the ſame time irregular and failing. ||*Cælius Aurel.*

a few minutes ſlow, nay, intermitting; ſometimes fluttering. *Huxham.*

Pulſe exceedingly quick; ſeldom leſs than a hundred and thirty, and generally very feeble. *Wall.*

Pulſe quicker and weaker, than natural. *Sauvage Noſ. Method. Typhus nervoſus.*

Faintings on the acceſs of the complaint. § *Cæl. Aurel.*

See alſo Aretæus on the cure of this diſeaſe.

The load on the præcordia, anxiety and faintneſs, grow more urgent, and they often fall into an actual delirium, eſpecially if they attempt to ſit up. *Huxham.*

Cauſes of the Diſeaſe aſſigned by the Ancient Authors.

It takes place after immoderate abſtinence, or ill-

Cauſes of the Diſeaſe aſſigned by the Moderns.

It moſt commonly attacks perſons of weak nerves,

* Venarum exigui, imbecillique pulſus ſunt.

† Pulſus celer, denſus, humilis.

‡ Pulſus obſcurus.

|| Pulſus denſus, celer, parvus, imbecillus, inanis, et quaſi fluens: increſcente paſſione etiam demerſus, obſcurus, tremulus, et formicabilis, et inordinatus ac deferens.

§ Animi defectus imminentibus acceſſionibus.

timed

timed bleeding, or when any other imprudent evacuation has been used.—*Galen. Medicus*, p. 56.—*Edit. Juntas, Venet.*

The causes that produce this complaint are many and various, but especially long continued indigestion or intemperance in wine, or using the bath after meals, or taking emetics after supper, or the passions of grief or fear, which producing effects similar to the natural tendency of the constitution, dissolve the body in violent sweats. * *Cæl. Aur.*

a lax habit of body, and a poor thin blood; those who have suffered great evacuations, a long dejection of spirits, immoderate watchings, studies, fatigue, and the like; and also those who have used much crude, unwholesome food, vapid impure drinks, or who have been confined long in damp foul air; that have broken the vigour of their constitutions by salivations, too frequent purgings, immoderate venery, &c. *Huxham.*

Despondency of mind is reckoned among the causes of putrid diseases by Dr. *Lettsom*, p. 5.

Ancient Method of Cure.

Indication I.

To restrain the Sweats.

It is proper to use several efficacious remedies, both

Modern Method of Cure.

Indication I.

To restrain the Sweats.

Profuse sweats should never be encouraged. *Huxham.*

* Sed præcedentes causæ quibus hæc passio sufficitur multæ atque variæ sunt: magis autem jugis indigestio, vel vinolentia aut post cibum lavacra, aut post cœnam vomitus aut mæstitudo vel timor in quæ consentiens corpus solvitur in sudores.

to

to reſtrain the ſweats, and reſtore the ſtrength. * *Aretæus.*

The firſt attempt to be made towards the cure is, to apply aſtringent cataplaſms to the præcordia, and the ſecond, to reſtrain the ſweats. † *Celſus.*

Profuſe ſweats are ſeldom or never advantageous.— *Huxham.*

1. *By internal Remedies.*

a. *By Wine.*

If however a profuſe ſweat ſhould break out, and the pulſe ſhould fail, the voice become acute, and the breaſt grow cold, it is proper to give as much wine as the patient can drink, for in ſuch circumſtances, wine affords the only hope. ‡ *Aretæus.*

1. *By internal Remedies.*

a. *By Wine.*

In ſuch profuſe colliquative ſweats, I have very frequently given a little generous red wine, diluted ſomewhat, if neceſſary, with the greateſt advantage, it preſently moderating the ſweat, &c.— *Huxham.*

b. *By Opium.*

A circumſtance is often obſerved in the Morbus Cardiacus, in which there is

2. *By Opium.*

Wall on the Synochus, Caſe I. and Caſe VIII.

* Χρὴ δη καὶ τῆ αλλη ἰηἴρέιη ενεργω χρέεσθαι, εςτε την των ιδρωἴων καθεξιν, καὶ της δυναμιος αναςασιν ες το ζωπυρον.

† Curatio prima eſt ſupra præcordia imponere quæ reprimunt, cataplaſmata: ſecunda ſudorem cohibere.

‡ Ην δε πολυς μεν ιδρως εκρεη, σφυγμοι δε προς ακινησιην, οξεια δε φωνη, αθερμα δε καὶ τα ςηθεα, διδοναι δε καὶ του οινου οκοσον αν δυνηἴαι πιειν, μουνος γαρ οινος ελπις ες ζωην ψυχροις.

the

the greateſt neceſſity for employing theriaca. For when the body is melted down by profuſe and continued ſweats, and the ſtrength fails ſo much that even wine will not afford a ſufficient ſupport to enable the patient to reſiſt the diſorder, when this is given it proves a remedy, and as it were rouſes the decaying ſtrength, and reſtores health to the ſick. *Galen. de Theriacâ ad Piſonem*, p. 96.

c. *By Peruvian Bark.*

Huxham on Fevers, p. 89. Edition the third.

Lettſom's Med. Memoirs, Caſe XXXV.

Home Princip. Medicin.

d. *By cold Liquors.*

Let what he takes at the beginning of the diſorder be warm, but afterwards all cold, if no internal inflammation be preſent.—* *Aretæus.*

It is proper to give drink cold, in point of temper-

d. *By cold Liquors.*

Lettſom's Med. Memoirs, paſſim.

* Τα πρωτα θερμωδεες—επι δε τοισι τα παντα ψυχρα, ην μη υποικουρεωσι φλεγμοναι.

 ature,

ature, in ſmall quantities, and at ſmall intervals, that the body may not be weakened by being as it were deluged with liquids, but rather ſtrengthened by the contact of a cold body. **Cæl. Aurel.*

2. *By external Applications.*
a *Of cool Air.*

The patient ſhould be covered lightly with clothes, and placed in a cool place with the windows open, ſo that a thorough draught of air may come upon him. †*Celſus.*

Let him lie in a cool air, in a chamber of a northerly aſpect, that the cool northerly breezes may blow upon him and recal to life, his almoſt departing ſoul. ‡ *Aretæus. Ætii*, 438.

If the place be not naturally cool, we muſt make

2. *By external Applications.*
a *Of cool Air.*

Lettſom's Med. Memoirs, paſſim, where the advantages of cool and pure air are ſtrongly inculcated.

Cullen's Firſt Lines of the Practice of Phyſic. Sect. CCII.

* Potum dabimus frigidum, parvum, atque paulatim, ne liquoris multitudine corpus irrigatum laxetur, ſed magis tactu frigidæ qualitatis denſetur.

† Levi veſte debet eſſe contectus, poſituſque in loco non calido, feneſtris patentibus, ſic ut perflatus aliquis accedat.

‡ Κατακεεσθω δε εν περι ψυχρω, ειτε καὶ πρὸς αρκτον ο οικος ειδε καὶ ειη αυρη Βορεου, ψυχρη επιπνειυσα ζωγρησει.

——κακως κεκαφηοτα θυμον. *Hom. Il.* v. 696.

it

it ſo artificially by taking away the window frames, unleſs the ſun's entrance or the inclemency of the air forbids. * *Cæl Aurel.*

b. *Of cold Water.*

Sweats are ſometimes checked by the application of a ſpunge ſoaked in cold water, to the face. † *Aretæus.*

It is proper to uſe ſoft ſponges ſqueezed out of cold water, which being applied to the face and neck of the ſick perſon, and repeated at intervals, cauſe him to recover his ſtrength. We alſo do the ſame by the whole of the breaſt and face, preſ-

b. *Of cold Water.*

See Cullen's Firſt Lines of the Practice of Phyſic. Sect. CCIII, CCIV. *Lettſom's Medical Memoirs*, p. 18. *note.*

* Denique ſi non fuerit naturaliter frigidus locus hoc affectabimus, ſpecularia detrahentes, niſi ſol obſtiterit aut acris inequalitas. See more on this ſubject in Cœlius Aurelianus, in the ſame chapter, ſection 192, 193, &c.

† Εϛησε δε κοτε ιδρωτας και σπογγιη ψυχρου ες τα προσωπα προσβληθεισα.

(Dr. Cullen ſpeaks of it as a diſcovery of modern times, that the body might in putrid fevers be waſhed all over with cold water; but Cælius Aurelianus, though he does not approve of it, mentions it as a practice of his time; ſo that at any rate it is no modern diſcovery.) " Alii vero in aquam frigidam ægros depoſuerunt."—*Cæl. Aur.* lib. ii. c. xxxviii.

ſing

ſing on them the water from the ſponges, which is mixed with a portion of vinegar, and often changed, that it may not grow warm from continuing in contact with the part, and ſo loſe its tonic powers. * *Cæl. Aurel.*

c. *Of Medicinal Subſtances.*

aa. *Of Aſtringents.*

Leaves of myrtle and wormwood, of the juice of the acacia, of that of unripe grapes, of alum, and juice of roſes, applied to the breaſt. *Aretæus.*

Dried roſes, powdered alum, pomegranates, and acacia powdered and ſprinkled on the body. *Cæl. Aurel.*

Powder of myrtle leaves, or of thoſe of the blackberry, of the lees of wine, in-

* Utendum etiam ſpongiis teneris ex aquâ frigidâ expreſſis, quibus ora atque colla ægrotantis circumtegentes virium reſumptionem faciamus, temporum intervallis innovantes. Tunc totum etiam pectus atque oris partes, eodem modo percuramus, frigidam infundentes ſpongiis, admiſcentes etiam aceti quiddam, ac jugiter mutantes, ne perſeveratione tactûs ex vapore tepeſcant, et amiſſo frigore non valeant facere denſitatem.

ſpiſſated

ſpiſſated and dried rubbed upon the body. *Celſus.*

bb. *Of Subſtances abſorbent of Moiſture.*

Samian earth, ſlacked lime, calcined gypſum, and flour, ſprinkled on the parts liable to perſpiration. *Aretæus.*

Chalk, Samian earth, clay, gypſum, powdered and ſprinkled on the body. *Cæl. Aur.*

Gypſum, clay, and chalk rubbed upon the body. *Celſus.*

Indication II.

To excite the Powers of Life, and to reſtore the Strength.

See the firſt quotation from Aretæus, under the former Indication.

1. *By internal Remedies.*

a. *Strengthening Diet, both of Liquids and Solids.*

We muſt ſupport the patient with ſuch Diet as is moſt fitted to warm and nouriſh the body, as wine cooled with ſnow, and ſuch food as is rather of

Indication II.

To excite the Powers of Life, and to reſtore the Strength.

See *Home's Principia Medicin.* p. 80.

1. *By internal Remedies.*

a. *Strengthening Diet, both of Liquids and Solids. Huxham*, p. 83.

The ſtrength is to be ſupported by wine, chicken-broths, and a nouriſhing diet. *Home. Sauvage.*—*Typhus nervoſus.*

Lettſom's Med. Memoirs

a ſtrong

a ſtrong kind, and ſuch as may ſtrengthen the ſtomach. *Medicus Galeni*, p. 56.

The third thing to be done for the cure of the Morbus Cardiacus, is to ſupport the ſtrength of the ſick, by wine, and nouriſhing food. This, however, is to be given in ſmall quantities, but frequently, and by night as well as by day, that it may nouriſh the body, and not overload the ſtomach. We ſhould not, except it be abſolutely neceſſary, be too forward to employ wine as a remedy. If, indeed, there is reaſon to apprehend that the ſtrength may fail, then we ſhould give it with food mixed with flour, eſpecially if the ſick perſon takes but little food. The wine ſhould be of the rough kind, but neverthleſs thin, though but little diluted, and cool, and taken freely. The wine ſhould be in its quality neither very weak nor very ſtrong, and it ſhould be taken by

on the Uſe of Wine, particularly claret, which he adviſes from one pint to three quarts daily, p. 21.

the

the patient to the quantity of two or three heminæ in the ſpace of a day and a night; if the patient be a bulky perſon, more may be taken, eſpecially if he takes but little ſolid food. * *Celſus.*

Let the food that he takes through the day be light, eaſy of digeſtion, and compoſed for the moſt part of bread-corn. Let it be made agreeable to the palate, even though it ſhould be leſs proper in point of quality, ſince, in this complaint, it is par-

* Tertium auxilium eſt, imbecillitati jacentis cibo vinoque ſuccurrere. Cibus non multus quidem, ſed ſæpe tamen, noćte ac die dandus eſt; ut nutriat, neque oneret. Is eſſe debet ex infirmiſſimâ materiâ, et ſtomacho aptus. Niſi autem neceſſe eſt, ad vinum feſtinare non oportet. Si verendum eſt ne deficiat, tum et intrita ex hoc, et hoc ipſum auſterum quidem, ſed tamen tenue, meraculum, egelidum, ſubinde et liberaliter dandum eſt; adjećtâ polentâ, ſi modo is æger parum cibi aſſumit. Idque vinum eſſe debet, neque nullarum virium, neque ingentium: rećteque tota die ac noćte, duas vel tres heminas æger bibet; ſi vaſtius corpus eſt, plus etiam: ſi cibum non accipit.

N. B. A Hemina is about half an Engliſh pint, according to Dr. Arbuthnot, but according to others, twelve ounces, or three quarters of a pint. *See Greaves' Works, publiſhed by Dr. Birch,* vol. i. p. 301. It was equal to the Cotyla. *See Rhemnius Fannius, Lib.* 67. Six Cyathi were equal to a Cotyla. See *Rhemn. Fann L.* 73.

ticularly neceſſary to conſult the appetite, as the diſorder itſelf is ſo nearly connected with weakneſs of the ſtomach. Hunger, or want of nouriſhment, are by all means to be avoided, as this diſeaſe is ſuited to the taking nouriſhment of all kinds. * *Aretæus.*

Let the food be of different ſorts, moſtly of wheat-flour, and ſuch as may be ſupped up, rather than ſuch as requires chewing; or, if ſolid food be given, let it at leaſt be of the ſoft or ſlippery kind, as yolks of eggs half roaſted, two or three ſlices of bread dipped in wine, which ſhould be given at firſt warm, but in the progreſs of the diſeaſe every thing ſhould be given cold, unleſs there be ſome internal inflammation.

* Τροφὴ, ανα πᾶσαν ημέραν, κουφη, ευπεπτος, τα πολλα σιτώδης, ηδε και ηδεῖα, κὴν σμικρον χεῖρον ἐη. τοῖσίδε γαρ, των αλλων μαλλον, χαριστεον· ουχ ηκιστα γαρ τω στομαχω ες εκλυσιν η νουσος αμφυει. Ασιτια δε, η λιμος ουδαμα. ικανη γαρ η νοῦσος τα πάντα λαφυξαι.

A ſimilar caution relative to the giving ſuch food as is more agreeable, though leſs proper, is given in the ſecond ſection, and thirty-eighth aphoriſm of Hippocrates.

mation. Let the wine be of a pleaſant flavour, not very aſtringent, and by no means rich or heavy. Of the Greek wines, he may uſe the Chian, or the Leſbian, and ſuch other of the wines from the Iſlands of the Archipelago, as are of a thin conſiſtence. Of the Italian wines, he may uſe the Surrentine, the Fundanian, or the Signine; if this laſt ſhould not be too aſtringent. Such wine, however, is to be avoided, as is either too new, or too old. Let it, however, be adminiſtered at firſt warm, and not leſs than four cyathi, nor more than a cotyla, before the criſis, even though he ſhould be deſirous of it. Afterwards, when he has taken food, and the inflammatory diſpoſition has abated, you may give him as much cold wine as is ſufficient to quench his thirſt, but not alone, but joined with food; taking care, how-

ever, that it may not be enough to diſorder his underſtanding. **Aretæus*.

Cœlius Aurelianus directs various kinds of food to be given, and the thin wines, if any fever remains, as the Sabine, the Surrentine, and the Tyburitine; but if great weakneſs without fever prevails, to try the Setine and the Falernian, which were ſtronger bodied wines. *Cœl. Aur.* lib. ii. cxxxvii.

It is certain, that in the Morbus Cardiacus all our hopes are centered in wine. Some think that this ſhould not be given but at the acceſs of the diſorder,

* Εστω ὦν σιτια μεν ποικιλα, τα πολλα σιτωδεα ως ρυμφανειν μαλλον η μασσᾶσθαι. κην στερεα εη, ολισθηρα εσεσθαι γιγνεσθω· ωα μη καρτα ξυνεστωτα, μηδ' οπτα ολα του στερεου γυμνα· ψωμοι διαβροχοι οινω, τα πρωτα θερμωδεες, δυω, η τρεις. Επι δε τοισι τα παντα ψυχρα, ην μη υποικουρεωσι φλεγμοναι. Οινος ευωδης, μη καρτα στυφων, πλατυς δε ως ηκιστα. Ελληνικοι μεν, Χιος ἢ Λεσβιος, οκοισι τε αλλοι νησιωται λεπτοι· Ιταλων Συρεντινος, η Φουνδανος' η Φαλερινος, η Σιγνινος ει μη σφοδρα στυφη. παραιτεεσθαι δε τωνδε τον καρτα παλαιον, η νεωτερον.

Διδοναι ων τα πρωτα θερμον, μη μειον κυαθων τεσσαρων, προ της Χρισιος, μηδε κοτυλης πλειον, κην ευποτος εη. Επι δε τωνδε, σιτιον διδοντα, ει τα της φλεγμασιης παρηκοι, αυθις ψυχρον ορεγειν, οκως ες ακος διψεως· προς αναγκην δε, μη μονον μεν, ξυνσιτιω δε. Προνοεισθαι δε χρη, ως μη αψιν φρενῶν ὁ οινος ποιεηται.

disorder, others not until its force abates. The former of these opinions refers to the restraining the sweats, the latter is founded on the idea of its being safer when the disease abates in its violence, which I find is the general opinion. *Plin. Nat. Hist.* lib. xxiii. c. 1.

b. *By Medicines internally taken.*

See the quotation from Galen, § *b*, of the first indication.

b. *By Medicines internally taken.*

Theriaca Andromachi in small quantities, compound powder of contrayerva.—Saffron, Raleigh's confect. with a saline draught every 5th, 6th, or 8th hour.

Sp. vol. aromat. or fœtid. given now and then in cyder whey, or mustard whey.

Tincture of Peruv. bark in small quantities, with saffron and snake-root.

Preparations of the Peruv. bark.

Emetics at the beginning of the disorder. *Huxham.*

Peruvian bark in strong infusion, as, of three ounces

 of

of the bark in powder to a quart of water, which is boiled down to ten ounces; which quantity is directed to be taken in twenty-four hours. *Lettsom's Med. Memoirs*, p. 15

Opium largely administered *Wall, passim.*

2. *By using Evacuations sparingly.*

a. *Bleeding.*

The taking away much blood at a time weakens the powers of nature, and much less is to be taken on this, than other occasions; for, if you exceed ever so little during the time, the patient is subject to fainting, it easily puts an end to life. * *Aretæus.*

Reason bears witness, that bleeding the patient, differs in no respect from cutting his throat. † *Cæl. Aurel.*

2. *By using Evacutions sparingly.*

a. *Bleeding.*

I think it is very evident, that no great evacuations are proper (especially bleeding), particularly in persons of originally weak and lax constitutions who are by far the most subject to it. *Huxham.*

Bleeding is always injurious, unless in an inflammatory state of the blood. *Home.*

Above all things be sure to refrain the use of the lancet, as you value the life of the patient, and

* ——— Ελεγχει γαρ την Φυσιν το αθροον· και πολλον τι μειον, η δι' αλλας προφασιας, αφαιρεειν· ην γαρ επι Συγκοπη και σμικρον αμαρτων, ρηιδιως εις αδου τρεπει.

† Phlebotomiam nihil jugulatione differre, ratio testatur.

your

your own reputation. *Modern Theory of the Practice of Physic, by Brown Langrishe, p. 343.* *See Wall, p. 11.*

b. *Purging.*

Clysters are only neceſſary to diſcharge the long retained hardened excrements, as we muſt be cautious not to diminiſh the ſtrength of the body. * *Aretæus.*

It is a moſt deſtructive practice in the Morbus Cardiacus, to excite a diſcharge by the bowels, as long as the nauſea, and diſlike of food continues. † *Cœl. Aur.*

b. *Purging.*

I have known a common purge, injudiciouſly given, at the beginning of this fever, immediately followed by ſurpriſing languors, ſyncope, and a large train of other ill ſymptoms.

Clyſters of milk, ſugar, and ſalt, may be injected with ſafety and advantage, every ſecond or third day, if nature wants to be prompted to ſtool. *Huxham.*

See *Wall*, p. 60.

c. *Sweating.*

See what has been ſaid above under the firſt indication.

c. *Sweating.*

See what has been ſaid above under the firſt indication.

3. *By external applications of the ſtimulating kind.*

The whole body is to be gently rubbed with bruiſed bulbi, which, when

3. *By external applications of the ſtimulating kind.*

Bliſters ſhould be applied to the neck, occiput, or behind the ears. *Huxham.*

* Κλυσμοισι δε, επι σκυβαλοισι παλαιοισι μουνον χρεος. της δυναμεος δε φειδεο.

† Eſt enim pernicioſiſſimum in cardiacis faſtidio atteſtante ventris fluorem commovere.

they

they have grown dry upon the ſkin, cauſe the ſtomach to retain the wine ſwallowed, and by that means produce a return of warmth to the body, and ſtrength and power to the blood-veſſels. **Celſus.*

Freſh bulbi, thoſe particularly which are ſmall and red, with pepper and the ſoft dregs of vinegar, makes the beſt cataplaſm for the feet; this is, however, to be removed conſtantly at the expiration of an hour, leſt it ſhould ulcerate the parts. †*Aretæus.*

Cataplaſms of a ſimilar kind are mentioned by Cœlius Aurelianus, as having been applied in this diſeaſe ‡.

Epiſpaſtics are adviſed by Dr. Home. *Princ. Medic.* But, I believe, they are leſs uſed in modern practice than formerly.

4. *By*

* Totum corpus bulbis contritis ſuper illinendum eſt; qui, ubi inaruerunt, efficiunt, ut vinum in ſtomacho contineatur, exque eo toto corpori calor, veniſque vis redeat.

† Ἀταρ καὶ βολβοι ωμοι, οι σμικροι τε καὶ ερυθροι, ξὺν πεπέρει καὶ οξους τρυγιη λειη αριϛον Επιπλασμα των ποδων· καθ ωρην ξυνεχεϛαλα αειρονla, κινδυνος γαρ ελκεων ηδε φλυκlαινωσιος.

‡ Cataplaſmata præterea ex laſere et bulbis, item et calce cum pipere. *Cæl. Aur. L.* ii. *c.* xxxviii.

The

4. *By encouraging hopes of recovery, and by entertaining the mind of the patient.*

4. *By encouraging hopes of recovery, and by entertaining the mind of the patient.*

It is neceſſary that the ſick perſon himſelf keep up his ſpirits and courage, and that the phyſician ſhould entertain him with ſuch words and diſcourſe as may encourage him to hopes of recovery. **Aretæus.*

Let the ſick perſon be ſo placed as to overlook meadows, fountains, and ſoftly flowing ſtreams, whoſe grateful exhalations and beautiful appearance cheriſh the ſoul, revive the powers of nature, and produce an appetite for both liquid and ſolid food. If, however, the circumſtances of the patient will not afford theſe conveniences, it will be proper to imitate the cool breezes, by elegant fans, made

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The bulbi mentioned above, were probably ſome root of a plant of the garlick kind, which is even now applied by ſome practitioners to the feet as a milder ſtimulant than muſtard.

* Χρη ων αυτον τε αλκηεντα καὶ ευθυμον εμμεναι, καὶ τον ιητρον επεσι μεν παραφασθαι ες ευελπιστην εμμεναι.——

of branches of odorous trees; and in the ſpring time, the ground ſhould be ſtrewed with ſuch flowers and leaves as that ſeaſon produces. * *Aretæus.*

Let the ſight of the patient be gratified with the view of plants, paintings, and waters, ſo diſpoſed that every object he caſts his eye upon ſhould be of the pleaſureable kind. Let the diſcourſe of the attendants be cheerful, but let him be ſilent, though in good ſpirits. Let him have ſuch things to ſmell to as are of a pleaſant odour, and which do not overpower or ſtupify the ſenſes. The ſmell of ſome nouriſhing things is proper, as of meal moiſtened with water or vinegar, or of hot

* Εςω δε καὶ εις λειμωνας καὶ πηγας καὶ κελαρυζοντας οχετους· καὶ γαρ το ευπνοον τωνδε, καὶ η θυμηδιη καὶ την ψυχην θαλπει καὶ την φυσιν ζωγρει. αταρ καὶ προκλησις του φαγειν τε καὶ πιειν. Ην δε υπ' απορινς μη ταδε τις ευτυχη, μιμεεσθαι χρη καὶ αυρην ψυχρην πτορθων ευωδεων ηδονης ριπισι· καὶ ωρην εαρος φυλλοισι ηδ' ανθεσι τοισι παρεουσι ςορεσαντα την γην.

bread

bread fresh baked. **Aretæus.*

Mode of the disorder's terminating, if favourably.

If the disorder takes a favourable turn, the pulse rises, the body recovers its natural warmth, the difficulty of breathing is lessened, the mind becomes confident of recovery, and an access of strength is perceived on the taking of food. The sleep also becomes more sound, and resembles that which comes after fatigue. †*Cœl. Aurelian.*

But if the physician shall act in a rational manner, and all things go on prosperously, if the faintness has ceased, and any inflammations that may

Mode of the disorder's terminating, if favourably.

We have very seldom any thing completely critical in this fever; in many cases, only time itself seems to wear it off. *Huxham.*

This disorder terminates gradually in recovery, by the assistance of a discharge of saliva, gentle perspiration, discharge by stool, and turbid urine, but for the most part without any evident crisis. *Home.*

The natural progress of the disorder, whether it ended in recovery or in death, was slow and lin-

* Οψιος τερπωλη, φυλων, γεαφης, υδαλων, ως ορησθαι τα παντα ηδεως. λαλιη των παρεονlων φιλομειδης· ησυχιη, θυμηδιη του νοσεονlος. Οσμαι ευωδεες, αβαρεες ες κεφαλης αισθησιν. αλαξ καὶ των τρεφονlων οσμαι· αλφιlων, ξυν υδαlι δευθενlων, η οξει· αρlων θερμων, νεοπεπlων.

† At si in salutaria signa venire cœperint ægrotantes, pulsus resurgit, corporis frigus frangitur, et difficultas respirationis minuitur, accedente animi quadam securitate, et post sumptionem cibi, virium profectu: somnus quoque altior, tanquam post laborem dormientium. *Cœl. Aurel.*

have

have taken place are discussed; if the sweats are ceased, if a warmth of temperature be reproduced over the body, even in the extreme parts of the body, feet, and in the nose, if the face recovers it colours, the pulse rises in strength, and is no longer tremulous, but steady, if the voice comes back to its usual tone, and the patient is altogether lively and alert, and no longer feels tired and weak, and gets some natural sleep, and during that time digests his food; if he recovers his senses during sleep, and nature seems to be refreshed by it, and when he awakes, breathes easily, and is more strong and active, and seems to recollect what happened during his disease as it were a dream, these are signs of recovery. **Aretæus.*

gering. Either the comatose symptoms gained ground, and without any very manifest alteration that could be marked with precision, the patient sunk into dissolution: or, on the other hand, without any distinguished crisis, he became gradually more calm, collected, sensible, more free from feverish heat; and by an imperceptible progression acquired more appetite and strength, till health was perfectly restored. *Wall.*

The

* Κὴν παντα μεν τα κατα λόγον ἰητρὸς ἔρδη, ευ δε παντα χωρεη, ξυν τη Ξυγκοπη, καὶ ει φλεγμασιαι επιεασι, εκλυονται, καὶ ιδρως μεν ουδαμα·

The above comparative descriptions prove, that the nervous fever was a disease well known to the physicians of antiquity, and the two methods of cure here exhibited, are so similar, both in the general intentions, and in the means of fulfilling them, that on a transitory view we might be led to think that the one in use at present was borrowed from that practised by Aretæus and Cœlius Aurelianus. But it appears to me, that this resemblance in the practice of the two ages was, in a great measure at least, casual. Huxham, though not the first revivor of the cordial regimen, made considerable improvements upon the practice of his time in the cure of the disease; but he was often indecisive and timid in his operations, although his general intentions were proper and judicious. He was sensible of the necessity that

ουδαμᾶ· θερμης δε ανακλησις παντη, αταρ καὶ εις ακρους ποδας, καὶ ανα ρινα· το δε προσωπον ευχροον· σφυγμοι, ες μεγεθος ηρμενοι, ατρομοι σφοδροι· φωνη δε ξυνηθης· ευφωνος, καὶ τα παντα ζωωδης καματος ουκ αγεννης. αταρ ηδ' ευδων ορᾶται· καὶ ην ελη μιν υπνος, εξεπεψε μεν τα σιτια, εξεννηψε μεν την αισθησιν, αταρ εδ' εξεβλαστησε την φυην. Κην εξ υπνȣ εγρηται, ευπνοος, ευσταλης, ατονος· αναπεμπαζεται δε, οκωπερ ονας, τον νȣσον.

there

there was of ſupporting nature; yet he employed means in no degree adequate. A *little* wine mixed with ſago, gruel, or panado, or a *little* generous red wine *ſomewhat diluted* with water, is all he allows; and the cordial qualities of opium ſeem to have been altogether unknown to him, or at leaſt overlooked. He indeed directs a *little* Theriaca Andromachi, or Elix. Paregoricum, with ſomewhat of the ſame intent with which they are at preſent given, *viz.* "to calm the hurry and tumult of the blood and ſpirits, and to produce ſoft refreſhing ſlumbers;" but he diſapproves of giving any quantity of an opiate that could be really efficacious if the ſymptoms were urgent. It is extraordinary, that this eminent phyſician, who was profeſſedly ſo great an admirer of the ancient writers on medicine, and who well knew that this diſeaſe was the ſame which was called by them the Morbus Cardiacus, and who ſeems to approve of the method of cure recommended by Celſus, which conſiſts in giving wine in large quantities, ſhould not have imitated their practice in a more effectual manner. But it appears plainly, that he was

biaſſed

biaſſed by former prejudices, which he was afraid to ſhake off. He knew that profuſe ſweating was prejudicial, yet ſeems to wiſh to encourage perſpiration farther than is now found to be of ſervice. His candour and acuteneſs in obſervation pointed out the general indications, although his former prejudices would not ſuffer him to carry his intentions properly into execution.

M. de Sauvages appears to have improved upon Huxham's plan, though he evidently copies his practice in a great meaſure. He recommends the uſe of wine and cordials, and diſcourages the ſweating regimen altogether; but diſapproves of opiates, probably from the idea, however erroneous, of their counteracting his general indications of ſupporting the ſtrength and ſpirits. The free uſe of the laſt mentioned remedy is, perhaps, the greateſt improvement in modern times in the treatment of this diſorder. It is now found to act as a powerful cordial in ſuch caſes, and to ſecond the effects of wine in an admirable manner, contributing both to raiſe the ſpirits, and to excite the vital powers, and to reſtrain

 the

the immoderate evacuations both by ſtool and perſpiration.

So far modern practice, as appears by the above compariſon, ſeems to agree nearly with the ancient. It muſt be owned, that the enlargement of our Materia Medica has afforded us ſeveral advantages. The Peruvian bark is, without doubt, a medicine ſuited to the intention, but does not ſeem to poſſeſs any particular or ſpecific powers, like thoſe which it manifeſts in the intermittent fever; and ſince the ſcruples concerning the free uſe of wine and opium have been got over, appears to be leſs neceſſary than it was thought ſome years ago, when it was depended upon nearly altogether.—Our wines alſo may, *perhaps*, be ſuperior to thoſe uſed formerly, and cantharides afford us an opportunity of employing a ſtimulus, more certain and effectual than the methods recommended by Celſus, Aretæus, and Cælius Aurelianus; though, perhaps, their applications might ſufficiently anſwer the intention of rubefacients, which was all that was deſired *.

* See the quotation from Aretæus, under the third head of the ſecond indication of cure.

The

The various forms likewife in which opium may be taken are, undoubtedly, at leaft, convenient, and allow us greater latitude in fuiting them to the palate, inclination, or prejudice of different perfons.—Still, however, I muft think that the method of cure laid down by the old writers, is more full and explicit; and, upon the whole, preferable to any that I have feen even in the lateft publications.

Many material circumftances are fuggefted by Cælius Aurelianus and Aretæus, concerning which modern writers are either filent, or do not fufficiently inculcate their neceffity, nor defcribe the moft convenient method of ufing them.

Scarcely any attention is of greater importance in fuch fituations, than to preferve the *coolnefs* and *purity* of the air; but fcarcely any modern writers, that I have feen, Sydenham and Dr. Lettfom excepted, are fufficiently aware of the importance of thefe confiderations; which is the more extraordinary, as fo many interefting difcoveries have been made, of late years, on the nature and ufes of that fluid in the animal œconomy. The writers

of antiquity, however, are ſufficiently full and explicit on thoſe heads *.

It is true, that coolneſs of temperature is more neceſſary to be attended to in the warmer climates than in Great Britain, but the *purity* of the air is of equal importance in every ſituation; and this caution is to be particularly regarded in climates where the cold forbids a conſtant communication with the open air. The coldneſs of the liquors taken by the patient, is another article coinciding with the ſame intention, which is too little regarded by modern writers. Huxham, though he did not overlook this circumſtance, was rather timid, and much too cautious of what he ſeems to have deemed innovation; though it was in reality returning to the ancient practice. Though ſenſible of the neceſ-

* See Indication i. 2. *a.* Aretæus expreſsly directs, that the air ſhould be *pure* as well as *cool.* Καθαρος ηηρ, ψυχρότερος, ες αναπνευσιν. *Aretæus.*

Cœlius Aurelianus alludes to the ſame in the following paſſage:

Adjungitur frigori inducto purgatior aer ingrediens locum, qui ſua novitate ac miti acceſſu reficiat ægrotantem. *Cæl. Aurel.*

ſity of reſtraining profuſe diſcharges, by perſpiration, he was averſe to the application* of cold in any way for that purpoſe. Few modern writers beſides have noticed them, Dr. Lettſom excepted. The ancient writers, however, have paid ample attention to this article †.

Food is another important conſideration, too much neglected by modern authors. Huxham, indeed, has given ſome directions on this head, which are ſufficiently proper, and nearly agreeable to thoſe recommended by the old writers, but ſcarcely ſufficiently inſiſted upon. Sauvages has alſo mentioned ſome articles of diet, but ſeems to treat them rather as matters of courſe, than circumſtances of importance. The foregoing comparative view will ſhew how attentive the ancient phyſicians were in this reſpect.

The ſupport of the patient's ſpirits, by giving hopes and expectations of recovery, is of

* Cold air, cold linen, cold liquors, or a cold regimen are greatly improper. *Huxham.*

† See Indication i. 2. *b.* See alſo the quotation from Galen, Indication ii. 1. *a.*

the utmoſt * conſequence in this diſeaſe, yet is very little attended to by modern practitioners. Dr. Cullen has given ſome uſeful hints, and, indeed, as much as was conſiſtent with an elementary work, but I have not ſeen any thing of the kind in any modern practical writer. This, however, has not eſcaped the notice of Aretæus †, who recommends it very particularly. The ſame writer has alſo given ſeveral very proper directions concerning the amuſement and entertainment of the patient's mind, by drawing off the attention from pain and miſery to pleaſing objects, which circumſtance is no leſs a proof of ſound judgment, than of humane ſenſibility.

* Dr. Lettſom has noticed a remarkable paſſage in Sir Hans Sloane's Hiſtory of Jamaica (vol. i. Introd. p. 31.), wherein he mentions a conſiderable difference in the facility of curing the fevers of thoſe who had many occaſions of ſolicitude and concern upon their minds; and of the Indians reſident in the ſame iſland, who having fewer wants, poſſeſſed fewer cares, the diſeaſes of the latter yielding much ſooner to the ſame remedies. *Lettſom's Med. Mem.* p. 5.

† See Indication ii. 4.

Some

Some things, of apparently inferior concern, but by no means unworthy of regard, are noticed by Cælius Aurelianus. "The bed of the patient," ſays that judicious writer, "ſhould be in a proper medium, between ſoftneſs and hardneſs: the firſt promoting perſpiration too much, and the latter, by being uneaſy, preventing ſleep. The ſize of the bed is alſo conſidered and recommended to be ſuch, as may admit of a change of place to a cool part, without the trouble of removing from one bed to another *." The advantage of keeping the body in a quiet ſtate, is very properly deſcribed by the ſame author, who very judiciouſly connects the reſt of the body † with the compoſure of the mind. I cannot forbear on this occaſion to recommend to every medical practitioner a careful peruſal of what has been delivered by a moſt learned

* Lecti etiam latitudo atque ſpatium tantum probatur, quantum ſufficiat ægro, alterna converſatione alterius loci frigus accipere, ac deſertum vapore carere, quo mutuâ vice ſemper veluti nova repetendo, frigida inveniat, ut ſine ullâ lectorum mutatione, in eodem lecto mutatio fieri videatur. *Cæl. Aurelian. L. ii. Cap. xxxvii.*

† Jubentes eos quieſcere, non ſolum corporis officio, ſed ſi fieri poterit, etiam curâ animorum. *Ibid. Cæl. Aur.*

 and

and able member of this Society on this subject *. The importance of these apparently minute, but, in reality, great articles, is there pointed out, and the superiority of the ancient to the modern physicians, in this respect fully evinced. I need only add, that Aretæus is the author to whom that gentleman alludes; and the directions which he, with so much reason approves, are to be found in what Aretæus says on the cure of the Phrenitis.

* See Memoirs of the Medical Society of London, vol. i. Article xxxii.

ARTICLE II.

A Case of Angina Pectoris, with a Dissection.

By SAMUEL BLACK, M.D. of NEWRY, IRELAND.

[Communicated in a LETTER to Dr. PERCIVAL, MANCHESTER.]

READ, OCTOBER 24, 1796.

DEAR SIR,

THE wish which you so obligingly intimated, that I would communicate to you any thing curious or interesting that might occur in the exercise of my profession, induces me to trouble you with some account of a second case of the Angina Pectoris. The person in whom it occurred, was Mr. Joseph Carson, a very respectable merchant of this town, a man whose life was marked by the strictest regularity and temperance, and, indeed, by every thing that was exemplary in conduct, and virtuous in sentiment. Mr. Carson

Carſon had never been liable to gout, nor to any other complaint, that which is the ſubject of this paper excepted. The firſt attack occurred above thirty years ago, when Mr. Carſon was aged thirty-two. Being on horſeback, riding very ſlowly, and being very inattentive to the management of his horſe, the animal made a ſudden and dangerous ſtumble, in conſequence of which, Mr. Carſon inſtantly felt, what he called, a ſevere ſting at the heart. The ſenſation continued, with acute pain, for a minute; but no ſimilar feeling was experienced for a year. However, at the end of that time, on attempting to walk faſt up a hill, a ſudden and extremely violent pain in the cheſt obliged him to ſtand ſtill for fear of inſtant ſuffocation. For ſeveral years the attacks were very unfrequent, nor did they excite that alarm which they ought to have done. In time, however, they became more frequent, and more ſevere, and were attended with a peculiar ſenſation, extending along the arms, which Mr. Carſon compared to the ruſhing of a hot fluid. He now went to Dublin, in order to conſult the late Dr. Smyth. The chief remedy recommended by him

him was iſſues. Two were accordingly eſtabliſhed, and for four or five years much advantage was experienced from them, the attacks becoming leſs frequent, and leſs ſevere. Conceiving that the diſeaſe was now in a great meaſure cured, Mr. Carſon, as imprudently as unfortunately, cloſed up the iſſues; in conſequence of which, the complaint became much worſe. He was, indeed, ſufficiently prompt again to have recourſe to the remedy which had before afforded ſo much relief, and the iſſues were re-eſtabliſhed, but not with the ſame beneficial reſult as formerly. For the laſt twelve years of his life, the violence of the ſymptoms continued regularly to increaſe. But finding no relief from the advice of the moſt judicious phyſicians, and feeling a conviction of the fatal tendency of the diſorder, he forbore the uſe of all remedies, except laudanum, very large quantities of which were rendered indiſpenſable by the extreme ſeverity of the nocturnal paroxyſms. In the month of December laſt, theſe became of unuſual violence, frequency, and duration. In the beginning of February, while ſitting in the evening drinking ſome chocolate, he fell ſuddenly off his chair, and inſtantly

ſtantly expired. You will readily believe, that I felt the moſt anxious ſolicitude to have an opportunity of examining the body. That liberty being permitted, the examination was made next morning.

DISSECTION.

The cellular membrane was univerſally loaded with fat. An incipient oſſification was diſcoverable in the cartilages of ſome of the ribs. On opening the thorax, the mediaſtinum was covered with a layer of fat of unuſual thickneſs and extent. There was an effuſion into the pericardium, of a ſerous fluid to the amount of nearly four ounces; but none into either cavity of the thorax. The heart, on being handled, appeared ſound, and not lacerable, as in the caſe of Mr. Woodney *. The aorta appeared ſomewhat dilated. The valves were ſound. On examining the coronary arteries, I found, with a mixture of ſatisfaction and ſurprize, that they were completely oſſified through their whole extent. I cut them out, preſerved them, and they are ſtill in my poſſeſſion. The more remarkable of the two, immediately after its origin,

* Vide Mem. Med. Soc. vol. iv.

divides

divides into two capital branches, the larger of theſe is a ſolid bone, the other, though apparently ſomewhat pervious, yet extremely oſſeous through its whole extent: and even the ſmall ramifications from theſe capital branches were completely indurated and inflexible. The abdominal viſcera were found.

This diſſection ſuggeſts ſome reflections which appear to me to be of conſiderable importance: and, firſt, the remarkable coincidence (in what I conceive to be the eſſential point) with that of Mr. Woodney, is a circumſtance very deſerving of obſervation. It appears to me probable, that the true pathology of this diſeaſe may be more ſimple and uniform than has been commonly imagined, or than I have myſelf repreſented it in my paper on Mr. Woodney's caſe. If you deſire me to ſtate my opinion on this head, it is briefly this:—That the primary and original cauſe of the diſorder is, perhaps, in every inſtance, the oſſification of the coronaries; and that the effuſion of fluid, and the accumulation of fat, which diſſectors have obſerved, are to be conſidered as the natural, and, indeed, the neceſſary effects of this oſſification.

cation. When I ſay neceſſary, I would be underſtood to mean, when the diſeaſe has been of long ſtanding. How effuſion ſhould be the conſequence of diſeaſed or obſtructed veſſels, is ſurely too obvious to require any illuſtration. The accumulation of fat is, I think, pretty clearly deducible from the ſame cauſe; the diſeaſed ſtate of the heart produces an impeded and weakened action of that organ; the blood is not propelled into the diſtant veſſels with the force that is natural and neceſſary, the exhalation (in parts remote from the heart), and all the thinner excretions, are diminiſhed, a plethoric ſtate of the ſanguiferous ſyſtem is induced, and oil is depoſited in unuſual quantity, in the cellular membrane. This depoſition of oil is much favoured by the patient's inability to uſe his accuſtomed exerciſe. The effects of iſſues, and of all remedies tending to keep up the thinner excretions, in palliating the ſymptoms of this complaint, are beſt explained by this view of the ſubject.

It will, perhaps, be objected to this reaſoning, that there are on record ſome diſſections, in which no organic degeneracy whatever was diſcovered (Med. Tranſ. vol. iii.), and

and others, in which the effuſion and the accumulation of fat were obſerved (Med. Obſerv. vol. v.), but not the oſſification of the coronaries. To this I anſwer,

1ſt, That the diſſections relating to this diſorder are by no means numerous, being all, ſo far as I know, contained in the two works already quoted. Of theſe few, there is one (the diſſection of the body of H. R. Eſq. by Mr. John Hunter) perfectly coinciding with the two which have fallen under my obſervation.

2d, With reſpect to thoſe diſſections in which the oſſification of the coronaries was not found, I obſerve, that the coronaries are ſmall veſſels, and that they do not lie altogether ſuperficial, but are, in ſome degree, buried in the ſubſtance of the heart, for which reaſon, I think it very poſſible that their condition might paſs unobſerved, even by a very accurate diſſector, if he were not particularly apprized of the neceſſity of attending minutely to that circumſtance. For my own part, if I had not been on my guard with reſpect to it, I think it would have paſſed unnoticed by me in the two diſſections of which I have now given you ſome account.

3d, I

3d, I obferve, that there are cafes innumerable, both on record, and daily paffing under our obfervation, as in the hydrothorax and empyema, in which an effufion of fluids does not excite the characteriftic fymptoms of this diforder; and with refpect to an accumulation of fat, though cafes of this kind are not fo numerous, yet every perfon acquainted with diffections will acknowledge, that many fuch are to be found in which no fuch fymptoms have been obferved.

4th, I am unable to find on record any cafe in which the offification of the coronaries was really found, and the fymptoms of Angina Pectoris were abfent. Let it not, however, be fuppofed that I mean to impeach the accuracy of other diffectors, or to prefs my own obfervations with an unbecoming confidence; my wifh is, that the point fhould be fully and clearly afcertained by future inveftigation. I expect, however, it will be found, that the ufual fimplicity and uniformity of nature prevail in this inftance; and fhall only take the liberty of adding, that the fame rules by which we are governed in claffing the great phænomena of nature may, I think, be applied, with much advantage, in all attempts

tempts to eſtabliſh pathological principles, viz.

" Cauſas rerum naturalium non plures " admitti debere, quam quæ et veræ ſint, et " earum phænomenis exponendis ſuffici- " ant."

" Ideoque effectuum naturalium, ejuſdem " generis, eædem aſſignandæ ſunt cauſæ, " *quatenus fieri poteſt.*"

I am, &c.

S. BLACK.

ARTICLE III.

A Case of Hydrocephalus internus, terminating successfully.

By Mr. EDMUND PITTS GAPPER, Surgeon, Ewell, Surrey.

[Communicated by Dr. FERRIS.]

Read, April 22, 1799.

The number of cases on record, of recovery from this dreadful disease, being unfortunately very few, will, I trust, be deemed a sufficient apology for my obtruding this case on the public; for every well ascertained fact, though comparatively unimportant in itself, yet, if it tends, even in the remotest degree, to elucidate an opinion, or detect an error, becomes of consequence to the cause of science.

The subject of this case, is a girl of twelve years of age, whom I was desired to visit, some time in the beginning of January last. She

She was ſeized in the fields, while employed in picking ſtones, with univerſal pain, heavineſs in her head, and dimneſs of ſight. This laſt ſymptom I was not informed of at the time, and could get no other account from her, than that " ſhe was ill all over." At this time there was not the leaſt heat on her ſkin, or any ſymptom of fever; the pulſe was ſcarce perceptible, and ſhe appeared ſtupid and inſenſible; ſome gently opening medicines were ordered, and I ſaw her again in a few days, my aſſiſtant having viſited her in the interval. I then found her complaining of ſickneſs, and pain in her head, though not in a ſufficient degree to excite in me an idea of there being any thing particularly extraordinary in the caſe. An emetic was adminiſtered, a bliſter applied to the nape of the neck, and the doſes of opening medicines increaſed, as coſtiveneſs was much complained of. She went on in this manner near a week, when all the ſymptoms began to increaſe; the pain in her head became ſo acute, as to produce at times, actions of violence, which rendered confinement neceſſary, and the intervals were marked by ſtupidity; ſhe was totally unable to bear an erect poſture, and her diſ-

treſs was very great and affecting. Theſe circumſtances led to a more particular examination. I found the pupil of the eye dilated to its utmoſt extent, and abſolutely immoveable, the pulſe ſmall and extremely quick, with a dry hot ſkin, a conſiderable degree of thirſt, though the tongue was but ſlightly furred. A ſtupor, conſtant watchfulneſs, a ſenſe of great weight in the head, ſickneſs, obſtinate coſtiveneſs, and ſmall evacuations of urine, were prominent ſymptoms, and which led me to infer, that the diſeaſe in queſtion could be no other than Hydrocephalus internus. When I thought myſelf convinced of this fact, which was in rather more than a fortnight from the firſt attack, I was determined to make a trial of the effect of mercury, ſo ſtrongly recommended by Dr. Dobſon, although the late Dr. Warren of Taunton doubted its having any effect on this diſeaſe, and had thrown out hints, that the caſes in which it was ſuppoſed to have ſucceeded, were not in reality Hydrocephalus internus, but aroſe from worms, or ſome other irritating cauſe in the primæ viæ. Now we know, from numberleſs facts, and, I can add, the teſtimony of my own experience, that collections

lections of water in the head have ever been attended with ſymptoms exactly correſponding with thoſe in the preſent caſe; and reaſoning from analogy, we may ſafely infer, that the conſequence of a certain ſet of ſymptoms in one caſe, will invariably be the ſame under ſimilar circumſtances, in another. Therefore, I think, I am warranted in pronouncing this caſe to be Hydrocephalus internus.

Under this idea, I now ordered half a drachm of ſtrong mercurial ointment to be rubbed into the thighs three times in a day, as I thought it expedient to get the mercury into the ſyſtem as ſoon as poſſible; and as heat and coſtiveneſs were to be obviated, I gave her powders of nitre and jalap every ſix hours, and recommended a diet of the moſt light and ſimple kind. In four or five days, her mouth began to be affected, and a conſiderable flow of ſaliva ſoon ſucceeded, attended with *a diſcharge of water from the noſe*, a circumſtance which has been noticed by former writers on this ſubject. This courſe was ſteadily perſiſted in for full three weeks, with the addition of fifteen drops of tinct.

 opii,

opii, morning and night, and which was gradually increaſed to forty drops at each doſe.

At the end of a fortnight, from the commencement of the ſalivation, an evident abatement of all the ſymptoms had taken place; ſhe could now ſit erect, and had loſt the ſenſe of weight in her head; the pupil of the eye had, in part, recovered its contractile power; the ſtupor was in a great degree removed; the quickneſs of the pulſe much abated; ſhe ſlept, and had in a great meaſure recovered her appetite. Under theſe encouraging circumſtances, the mercurial friction was continued another week, when I had the ſatiſfaction of ſeeing all the ſymptoms, except occaſional fits of delirium, vaniſh. Theſe paroxyſms had continued through the whole courſe of the diſeaſe, but were now much reduced, both in force and duration.

On duly weighing all the circumſtances of the caſe, I concluded that I had obtained all the advantages I could expect from the uſe of mercury; as there were evident proofs, from the diſappearance of the formidable ſymptoms with which my patient had been afflicted, that the original cauſe was removed,

and

and that a further continuance might induce too great a degree of irritability; it was, therefore discontinued. Fits of delirium ftill remained, to remove which, a blifter was applied over the whole head, the dofes of tinct. opii continued, and a grain and an half of emetic tartar adminiftered every three or four days. After the third dofe, the paroxyfms ceafed, and have not fince returned; and fhe is now in as perfect health as before the attack. I muft not omit to obferve, that no worms were difcharged in any ftage of the difeafe, neither was there any ftrabifmus.

It is a circumftance worth attending to in this cafe, that, together with the difcharge from the falivary glands, there was alfo a very confiderable one from the nofe, and that a gradual diminution of the fymptoms enfued as thofe difcharges increafed. I truft the fuccefsful termination of this cafe, by adding an important fact to the very few on record, will tend to excite the attention of the faculty to the fubject, and induce them to make further trials of mercury in this terrible difeafe; and probably, an early exhibition of

of it, before the energy of the brain is too much diminiſhed, may be attended with more beneficial effects than has hitherto been experienced; for, perhaps, its failure may in a great meaſure be attributed, to its being too long delayed. I did not think it adviſable, in this caſe, to give calomel, on account of the conſtant ſickneſs, particularly as the frequent doſes of jalap and nitre anſwered the purpoſe of clearing the inteſtines ſufficiently.

ARTICLE IV.

A Caſe of a Boy who became of a blue Colour ſome Months after Birth.

[Communicated in a LETTER to Dr. JAMES SIMS.]

By ED. THOMAS, M.D. &c. ST. KITTS.

READ, OCTOBER 7, 1799.

SIR,

I TAKE the liberty of tranſmitting to you a ſingular caſe of a boy, who, during a ſevere fit of ſickneſs, probably communicated by his mother, became perfectly blue.

The boy at preſent enjoys, in appearance, a perfect ſtate of health, is lively, playful, and active like other children. There is, however, an inexpreſſibly languid effeminacy in his look, or rather eyes, which are large and blue. His ſkin reſembles that of a delicate female labouring under ſcrofula; the colour of which, his father informs me, is ſtill influenced by the viciſſitudes of the weather, and

and particularly after a glaſs of wine. An inſtance of this change I was once a witneſs to, which induced me to inquire into his caſe.

The following is the account I had from his father, Mr. Owen, a worthy and enlightened clergyman, of the ſect of methodiſts, reſiding in the iſland of St. Chriſtopher, which, if thought worthy a place in the Memoirs of the London Medical Society, will gratify,

Yours, &c.

ED. THOMAS, M.D.

Member of the R. C. of Phyſicians of London and of Copenhagen.

The boy was born in the iſland of Tortola, January 16, 1794, and for ſome months ſubſequent to his birth, was as healthy and vigorous as children uſually are in the early periods of infancy; nor was there any ſtriking deviation from a natural complexion obſervable during that time.

In the month of March, it became neceſſary for his father to remove, with his family, to St. Vincent's; where, ſhortly after his arrival,

arrival, his wife was taken ill of a bilious remittent fever, which terminated in an irregular intermittent, whofe obftinacy bade defiance to medicine.

At length the lacteal fountain becoming vitiated, and incapable of fupplying the child with the pabulum of health and life, he was attacked with tender bowels and diarrhœa, attended with uneafy, reftlefs nights, and languor. Almoft, at the fame time, appeared, and increafed progreffively, an uncommon BLUENESS of the fkin, particularly perceptible in the temples, neck, wrifts, and fingers. It was remarked, that the hue was always deeper, whenever the fubject was moft under the influence of a cold and moift atmofphere. Dry and ferene weather generally procured him relief. An almoft continual palpitation of the heart, was another concomitant fymptom. But what was more poignant than all to the feelings of a doating parent, was difficulty of refpiration, frequently heightened into violent fits of afthma.

It would be endlefs to detail the feveral marks of furprize exhibited by ftrangers at the firft moment of feeing him: however, one

one inſtance may be related, as it will prove a caution to medical men, who hereafter meet with ſuch caſes, and induce them to deliver their opinions with prudent deliberation.

Some little time after this change of colour, he was attacked with fever, on which account the garriſon ſurgeon, who had been in the habit of attending the family, was called in, and his friendly and aſſiduous attention, experienced for ſome time; but the Charib war being then in its zenith, the duties of his ſtation interfering with his private practice, he was obliged to give it up. Another gentleman of the faculty was ſent for, who, on his arrival, found the little ſufferer lying in his mother's lap in a ſtupor. He examined him only with his eye, then called the father out, and, in as delicate a manner as poſſible, gave him to underſtand, that he muſt prepare for the worſt. He requeſted him to look at his nails, temples, &c. and ſaid, that he was already comatoſe, that he had never before been a witneſs of ſo rapid and general a mortification. The father was immediately aware of his miſtake, and endeavoured to remove it, by aſcribing the cauſe of alarm, not ſo much

to

to the colour, as to the other ſymptoms, but in vain; the learned and ſagacious doctor's word was fate, the child muſt die. The old adage, "while there is life there is hope," occurring to the father, he immediately applied ſinapiſms to the child's feet, and a large bliſter between its ſhoulders. The means proved effectual; the fever intermitted, the heavineſs diſappeared, and wonted health and ſtrength were in a ſhort time reſtored to the patient.

The frequent alarms and danger all the inhabitants of the colony were expoſed to, dictating the expediency of leaving it, he departed from that iſland, and removed to St. Kitt's, where he has ſince reſided. On his arrival, the appearance of the child was the ſame, and created no leſs wonder and concern in all who ſaw him; but it has gradually diſappeared, with all its diſagreeable attendants. The child is now four years of age, and anſwers the deſcription which I have previouſly given you.

ARTICLE V.

A Case of obstinate Hepatic Disease.

By J. C. LETTSOM, M.D. &c.

READ, NOVEMBER 11, 1797.

WILLIAM WARNER, a respectable surgeon and accoucheur, in the city, had always been temperate in his mode of living, and enjoyed a good state of health.

In April 1797, he had been much engaged in his profession, and exposed to the weather, which brought on a state of indisposition, and a mode of treatment, which form the following relation:

It was on the 22d of this month I first visited him; he had then been a few days only indisposed, which he ascribed to fatigue and cold. He then complained of considerable oppression and uneasiness about the region

 of

of the ſtomach, extending with increaſed pain to each hypochondrium, and ſome tenſion of the abdomen.

He was directed to take ſmall doſes of antimonials, which proved emetic, and afterwards neutral ſalts in the lac amygdalæ. The abdomen was fomented with the decoctum pro fomento.

Theſe not producing a ſufficient laxative effect, the oleum ricini was ſucceſsfully exhibited.

On the 23d, the ſymptoms appeared leſs ambiguous, the ſkin appeared tinged of a yellow colour; the urine alſo of the ſame colour, with increaſed pain about the region of the liver, and an hepatitis was obvious, which induced me to order venæſection, and calomel purgatives, with cooling medicines, and nutrition adapted to the diſeaſe. With the fever, connected with the diſeaſe, he occaſionally ſuffered from a cough, and ſometimes dyſuria; but moſt of the original ſymptoms had ſubſided towards the end of May; the ſtools, however, continued to be of a pale clay appearance, the urine of a deep dark yellow colour, with dyſpepſia, and ful-

neſs

neſs of the abdomen, not without conſiderable pain, as low as the pubis.

During the month of May, although he could enjoy a little exerciſe, he experienced conſiderable laſſitude; and the ſtools continued pale, and the urine high coloured: he took chiefly at this time ſoap, rhubarb, and aloes, in pills, and occaſionally bitter infuſions; and although he was ſometimes ſmartly purged, the colour of the ſtools did not much improve.

In July, the appearances had not much varied; the dyſuria, indeed, had increaſed, on which account, he took uva urſi, with medicines to produce efferveſcence, for the ſake of conveying fixed air into the ſtomach. He ſeemed to find ſome relief from a decoction of ginſeng; the dyſuria at leaſt was better, and the uneaſineſs and flatulence of the abdomen were mitigated. Occaſionally opiates were given, but in no form did they appear to agree with the patient.

In Auguſt, there was an increaſed fulneſs of the abdomen, with tenſion and ſoreneſs almoſt univerſally; the urine nearly purple, and in ſmall quantities, with pale fæces. I had

had begun to give him ſmall doſes of calomel, when he conſulted, at my requeſt, Dr. James Sims, who joined the digitalis purpurea with the calomel. In September, his mouth became tender from the calomel, and it was omitted, and a decoction of rubia tinctorum, and ſometimes bitter infuſions and chalybeate wine were ſubſtituted.

Early in November, he took the extract and decoction of taraxacum with rhubarb, ſoap, and ox-gall.

In the month of December, Dr. Saunders, whom he conſulted, adviſed the application to the ſide of unguentum hydrarg. fortis, which again induced a diſpoſition to ptyaliſm, when it was left off. With all theſe medicinal aids, the patient found no eſſential benefit; the jaundiced appearance ſometimes diminiſhed, but the ſtools were never of a natural colour for the ſpace of two days; the urine was high coloured, and he dragged on a miſerable life, frequently incapable of moving from home; the abdomen, indeed, was rather leſs tenſe, but it felt, to the touch, like a drum, ſimilar to peritonæal, or inteſtinal inflammation.

In January 1798, he began to try the nitric acid, of which he took in gruel, or other fluids, a drachm twice a-day; and this he continued pretty regularly during February, March, and April.

I ought to have obſerved, that, from a ſtate of original plumpneſs, he had gradually ſhrunk in the ſhoulders, cheſt, and lower extremities, but not in the abdomen, which continued full, tenſe, and ſomewhat enlarged.

During this long uſe of the nitric and nitrous acids, he appeared to gain ground; he was able to go abroad more frequently; the yellowneſs of the ſkin was rather diminiſhed, and he imagined that the fæces were of a more healthy colour; but it muſt be confeſſed, that he continued emaciated at the extremities, and the abdomen too full; he mentioned, however, that he found no inconvenience from the mineral acid, and, upon the whole, ſuffered leſs pain in the abdomen.

Towards the end of April, the patient experienced ſo little ſalutary change upon the whole, that he began to neglect the medicine; and,

and, in May, I think it was totally relinquiſhed, and never after reſumed.

In this weak, ſtationary, unhappy manner, he led a languid exiſtence, juſt capable of creeping abroad to viſit his patients in the vicinity, till near the middle of June, when a high degree of fever enſued: he was immediately confined to his bed, with pains almoſt univerſally, and more violently in the abdomen, with tenſion of the part, deep yellowneſs of the ſkin, and dark coloured vomiting. In this ſtate I found him, with debility, dyſpnœa, and a moſt rapid pulſe; and apparently irrecoverable, after the tedious and painful affections that had preceded. About the fourth day of the fever, a diarrhœa was procured, and, for the firſt time during the ſpace of fourteen months, the fæces were yellow, and loaded with bile, whilſt the urine and complexion were lighter. Theſe appearances, with the ceſſation of ſickneſs, afforded a gleam of hope: little more now was done than to keep up the ſecretions; and, happily, by the middle of July, the patient was in a moſt favourable ſtate of convaleſcence, and has continued to improve ever ſince: he has

regained his former ſtate of fleſh and complexion, and performs all his profeſſional duties.

In reflecting upon the whole train of ſymptoms and remedies, it is difficult to aſcertain by what means the recovery was effected.

Certainly no medicine ſeemed to have any ſalutary effect, after the firſt inflammatory ſymptoms had been ſubdued, except the nitric acid; and this apparent effect was ſo trivial, as to induce the patient, wearied out with taking it, to leave it entirely; at this time he thought he found rather inconvenience than benefit. It muſt be premiſed alſo, that he began this acid, after uſing freely mercury internally and externally, a medicine deſervedly recommended in hepatic obſtructions.

In what degree, and under what circumſtances, either of theſe powerful medicines might have influenced the conſtitution of the patient, and brought on the favourable change, I am ignorant. The mercury he had abandoned nearly ſix months, and the nitric acid ſix weeks before the fever at-

tacked him, and produced a conflict which, under a fatal aspect, terminated in his recovery. This, however, is certain, that no termination, and but a slight mitigation of the primary symptoms appeared, till the febrile onset took place, and which followed long after any active medicine had been exhibited.

London, March 14, 1798.

ARTICLE VI.

Caſe of a remarkable and ſucceſsful Termination of Scrotal Hernia.

By JAMES LEE, M.D. Spanish-Town, Jamaica.

[Communicated by Dr. BRODBELT.]

Read, February 24, 1800.

James, a negro, æt. 45, healthy and robuſt, was ſuddenly attacked with ſtrangulated hernia. After much loſs of time, I was called in to his aſſiſtance, and the uſual means to replace the gut proving unſucceſsful, I immediately had recourſe to the operation, which admitted of no farther delay, as the ſymptoms were putting on a truly alarming appearance. The operation being begun in the uſual manner, after careful diſſection, I brought the peritonæum into view, which exhibited ſuch an unhealthy appearance, as to give me little hopes of ſucceſs. I then opened the

the ſac, and divided it, though with difficulty, which brought to my more immediate view the real ſtate of the gut, which was ſo affected with gangrene, that I thought it prudent to give the patient a chance of his life, by making an artificial anus in the groin.

The ſymptoms after the operation were mild, conſidering the nature of the caſe; and great attention being paid, by the adminiſtration of bark, and other antiſeptics, with proper regimen, the man in a few weeks recovered, with no other inconvenience than what is experienced by paſſing the fæces at the groin.

About a year after the operation, I was ſuddenly called to viſit him: I found him in violent pain, particularly in the abdomen, ſhooting to the affected groin, and which was much ſwollen. He informed me, that no fæces had paſſed by the wound as uſual for ſome days.

On examining the groin, I found that ſuch an adheſion had taken place, as ſcarcely to admit the introduction of the probe, and I did not think it prudent to make uſe of force.

The abdomen was fomented, emollient clyſters were thrown up the rectum, and another attempt was made to cauſe the fæces to be expelled by the groin.

On the following day, the tenſion of the abdomen, and the pain and debility being increaſed, with ſingultus, vomiting, and other alarming ſymptoms, opiates were liberally adminiſtered; and towards evening, when a fatal termination of the diſeaſe was apprehended, the patient had a call to ſtool, and, to the ſurpriſe of every one, the fæces were expelled by the anus.

From this period all the unfavourable ſymptoms ſubſided, and in the courſe of a very ſhort time the patient recovered his former health.

The wound in the groin has cicatrized, and although there is much fulneſs there, yet the fæces have been expelled by the anus ever ſince.

The man is a maſon, and undergoes conſequently much bodily labour, but he ſuffers little inconvenience, and it is more than three years ſince this happy accident took place.

RE-

REMARKS.

There are few cafes of Herniæ more remarkable than the foregoing, and which is rendered ftill more fo by the favourable termination; and, I think it not improbable, that it was brought about by inflammation being by fome accidental caufe occafioned in the parts about the affected groin, which had produced an adhefion of the fides of the inteftines, and fubfequent erofion, which latter effect was affifted by the weight of the defcending fæces.

May, 1797.

ARTICLE VII.

A Case of Croup, successfully treated by Emetics.

By JOHN SMITH, SURGEON, C.M.S. and MEMBER OF THE MEDICAL SOCIETY OF PHILADELPHIA.

READ, MARCH 3, 1800.

June 7, 1795.

I VISITED Janet Bird, aged three years, of a florid countenance, in the third day of Croup. A dose of ipecacuanha had been given the first day of the complaint, which operating mildly, gave no relief.

The parents, sensible of the dangerous situation of the child, readily agreed to have any method adopted that would afford a hope of recovery.

Half a grain of tartar emetic was first given, and repeated every fifteen minutes for several times, without any effect. The following was then used:

R. Tartar.

℞ Tartar. Emetic. gr. viij. Vitriol. Alb. gr. xv.
Aq. Font. ℥iß. m.

Of this ſolution, two tea-ſpoonsful were given every fifteen minutes, till it operated violently, not diſcontinuing its uſe till round lumps of mucus were diſcharged. One of theſe lumps was above an inch in length, though not ſo broad to appearance as ſome that were at firſt thrown up. In colour they reſembled the white of an egg boiled, and were of a thick conſiſtence. The child's breathing was perfectly relieved by the operation of the liquid, which was all uſed. The cavity in the ſcrobiculus cordis, in which a ſmall hand could have been put at each inſpiration, the convulſive motion under the chin, and ſhrillneſs in breathing were no more obſerved. The little patient laid, for ſome time, as if worn out by the operation of the emetic. At night calomel ad gr. viij. was given, a bliſter applied between the ſhoulders, and a powder of jalap directed in the morning. She was ſoon well, and has had ſeveral ſlight attacks ſince, that have been removed by taking tartar emetic till the thick mucus is diſcharged.

Of ſix patients that year (1795), I loſt one. In the caſe that terminated fatally, no method

method I could contrive, would excite vomiting. Reflecting ſince on the ſubject, I am inclined to think, that vomiting, even in that inſtance, might have been effected by pouring a quantity of warm water into the ſtomach by means of a funnel.

I am prompted to forward the foregoing to the Medical Society of London, from the difference of practice recommended in their 4th volume of the Memoirs of the Society, and that adopted in the above caſe; confident that effectual relief can be but rarely afforded, by means that will not occaſion a removal of the mucous membrane that lines the trachea.

ARTICLE VIII.

A Caſe of Opiſthotonos, ſucceſsfully treated.

By the SAME.

READ, MARCH 3, 1800.

December 19, 1796.

I VISITED a female negro, aged twelve years: her head was drawn to one ſide; there was a great rigidity about the throat; ſhe could ſcarcely ſwallow a tea-ſpoonful of a thick liquid at a time. The abdomen hard, and puſhed forwards: the ſpine, particularly the lumbar region, bent back like a bow, to a degree that can ſcarcely be conceived by thoſe who have not ſeen patients in ſimilar circumſtances: the rigidity of the arms was conſiderable; that of the lower extremities ſo great, as to render it impoſſible to bend them in the leaſt degree.

After remiſſions of a few minutes, the muſcles were ſo ſtrongly convulſed, that ſhe ſprung

ſprung up in the bed, and was often thrown entirely out on the floor. The ſpaſms were preceded by a pain at the lower part of the vaſtus externus muſcle of the right ſide; great complaint was alſo made of pain darting under the enſiform cartilage. Skin cool and dry, pulſe regular, rather active.

The patient complained about the third of a pain in the back of the neck. The above ſymptoms came on about ſix days before, and were then more violent than at any former period of her illneſs.

The whites inſiſted, that no injury had been received by the negro previous to her indiſpoſition; on repeating my inquiries among the blacks, one of them obſerved, that her right leg had been burned three or four weeks before; that it had occaſioned a kernel in the groin, and ſoon dried up. On examination, a ſcab, the ſize of an Engliſh ſhilling, was found on the tibia, juſt below the knee:—this I cut off with an abſceſs lancet, and found that the ſkin underneath was healed. I then made an inciſion of ſome depth, and applied a cauſtic the full ſize of the incruſtation. ℞ Sal. chalybis, gr. v. flor. zinci, gr. ij. m. ſecundâ quâq. horâ ſumend.

With

With each powder a tea-ſpoonful of red bark was directed in brandy, an opium pill at night, and occaſionally a tea-ſpoonful of a mixture of laudan. liq. ʒvj. ol. ſuccin. rect. ʒij. an injection with tartar emetic in the morning, and the warm bath to open the pores.

The ſpaſms returned only three times after the cauſtic was applied, which occaſioned a large ſore, that ran freely. The bark was diſcontinued, from occaſioning a complaint in the bowels, and the powder of ſteel and zinc continued by itſelf, till ʒ vß. of the compoſition were taken. I heard no more of my patient (being detained in another part of the country), till the twenty-ſixth, when I was informed, that the rigidity was entirely gone; that there was a pain in the ſtomach, with coſtiveneſs and feveriſh ſymptoms, probably owing to the ſore occaſioned by the cauſtic, for which calomel, ad gr. x. was preſcribed, and a mixture of laudanum and oil of amber to be taken with the bark. In a few days the girl could walk about, and was ſoon perfectly well.

ARTICLE IX.

On the Origin of the Cow-Pox.

By JOS. HEAD MARSHALL, M.D. &c.

[Communicated by Mr. KING.]

READ, JUNE 16, 1800.

THE very extraordinary aſſertion brought forward by Dr. Jenner, in his firſt publication on the cow-pox, namely, that that diſeaſe originates in the horſe, and not in the cow, has occaſioned much controverſy. The following ſimple detail of a fact, that very lately came under my own obſervation, will, I think, tend greatly to elucidate it.

Being called to viſit a young woman, who is a dairy maid at a farmer's, I found her in bed, complaining of a pain in her back, laſſitude and thirſt. Her face was fluſhed, and her tongue foul. Upon requeſting her to give me her arm, I diſcovered upon the hand four or five large puſtules, which, from my

my knowledge of the diſeaſe, I immediately aſcertained to be cow-pox. On the back of the hand there had evidently been a long ſcratch, on a part of which appeared the primary puſtule; the others were very near it.

Upon making a ſtrict inquiry, I found one of the cows had this diſeaſe, and that in ſeveral of the others, it was alſo advancing. On farther inquiry, I alſo found, that the farmer had a horſe with ſore heels in the ſtable, which his ſon always attended, who did not uſually milk the cows; but that one morning, this cow being troubleſome and reſtive, he had, to relieve the dairy-maid, milked her himſelf.

From this plain and ſimple ſtate of facts, the origin of the diſeaſe became, in this inſtance, very apparent, as it could be clearly traced from the horſe to that individual cow which the young man milked, and through this medium to the dairy-maid, and thence to the reſt of the herd.

JOS. H. MARSHALL.

ARTICLE X.

A Case of Framboesia Guineaensis, or Yaws.

By JOS. ADAMS, M.D. &c. OF THE ISLAND OF MADEIRA.

READ, JUNE 30, 1800.

IN the latter end of September 1798, a young Danish nobleman, in the naval service of his king, was left at this island, his health not permitting him to continue his voyage to the West Indies. He complained of a slight but tolerably regular intermittent, attended, during the paroxysm, with a spasmodic contraction of the fauces. For this he found some relief in bark, the power of opening his mouth returning as the fever went off. This relief was only temporary, nor were other tonics attended with better success. He took a grain of calomel daily for ten days, during which his mouth became slightly affected, and his fever completely left him. It however returned as his gums recovered, and recourse

was

was had to ſal ammoniac, myrrh, and chamomile. Theſe ſeemed to ſucceed after five days' uſe, but the remiſſion of fever was attended with an univerſal pimply eruption over the face, and inflammation of the throat.

In the ſpace of two days the eruption was univerſal, excepting on his hands and feet. The throat became ulcered, and the glans penis was covered with ſeveral ſmall, but not painful ulcers. For ſeveral days the ulcers ſpread on both theſe places, and the puſtules continued to increaſe; his fever returned, and the throat and puſtules of the face were attended with conſiderable pain. The latter had arrived, in leſs than a week, to the ſize of ſmall-pox puſtules; and the interſtitial part of the ſkin being redder than uſual, gave the whole very much the appearance of that diſeaſe. The figure of the puſtule was indeed ſomewhat flatter, or rather more horizontal, the edges riſing perpendicular from the ſkin, and the ſurface being plain. There wanted alſo that appearance of indentation which very ſoon diſcovers itſelf in ſmall-pox, and frequently in the chicken-pox alſo. The throat had preciſely the appearance of a venereal ſore throat, but was more painful.

The continual increaſe of the puſtules after thoſe of the ſmall-pox ſhould have ſcabbed, precluded all doubts concerning that or any ſimilar morbid poiſon. In order, however, to ſatisfy myſelf ſtill further, I had removed the pellicle from one of the puſtules, and, inſtead of the ſlough peculiar to the ſmall-pox, found only a rough ſloughy ſurface attached to the ſubjacent cellular membrane.

By the application of *aq. phageden.* the ulcers on the glans penis ſoon became ſtationary, put on a better appearance, and healed. It was therefore evident they were not venereal, and as there was every reaſon to believe the puſtules only differed from theſe ulcers in being covered by a thicker cuticle, it was highly probable that the cure of them alſo was within the power of the conſtitution. It ſeemed, therefore, prudent to watch the diſeaſe, without attempting to interrupt it.

The eruptions continued to increaſe in number and ſize to ſuch a degree, that the ſoreneſs, abſtracted from the pain which was confined to thoſe in the face, rendered life ſcarcely tolerable. Before the end of the month, my patient counted, beſide a number of ſmaller ones, fifty-ſix large ſores; ſome of which being

ing of an oval form, were not lefs than from two to three inches in their largeft diameter. He was befide this reduced to a fkeleton; for though his appetite was throughout the whole better than could be expected, yet the ftate of his throat prevented his fwallowing even liquids without very great pain. From this time no new ones appeared, and all of them began to fcab. If therefore the difeafe was yaws, which I had long fufpected, the prefent feemed the time at which, by the concurrence of moft authors, mercury may be exhibited to advantage. The corrofive fublimate, though given in very fmall dofes, was more than the ftomach would bear: it was therefore given up almoft as foon as tried; and, as moft of the fores fhowed a difpofition to fcab, no other preparation of mercury was exhibited. The fever continued all this while with as much violence as before, and the ftate of the throat preventing the exhibition of bark by the mouth, it was given by clyfter with an opiate. Though, at firft, it did not leffen the fever, yet the general irritability of the conftitution was much abated, and by degrees the fever fubfided. The following had been the appearance and progrefs of the

 puftules:

puſtules: the cuticle ſhrunk and hardened into a ſcab, with the pus underneath it; in this manner it remained for a few days, when a ſuppuration commenced at the edges of, and under the ſcab, from which matter iſſued, and either raiſed part of the ſcab, or was diffuſed over it, or attached to its circumference, and hardened upon it. This was repeated an indefinite number of times, and each time attended with a return of fever. If any hairs were in the neighbourhood of a puſtule, they were ſo incruſted with pus as to make them appear white. The accumulation and hardening of matter over the ſcab, gave ſome of them the appearance of being ſtudded with tubercles: in others, the accumulation was more regular, ſo as to exhibit a horny appearance: the colour was, for the moſt part, of a light brown; but where blood was mixed with the pus, the complexion was redder. Wherever the inflammation ran high, the pus was thinner, and never hardened on the part. This happened only on a few puſtules of the face.

In about two months from the firſt appearance of the eruption, the fever returned with as much violence as before the eruption, par-

ticularly

ticularly thoſe about the face continued dry, and, in a few days, a ſlight ſeparation of the edges of ſome of the ſcabs ſhowed a ſound ſkin underneath. I had therefore no doubt but that the return of fever was ſymptomatic of a new action taking place, namely, that of deſquamation and the formation of new ſkin, as the former fevers had been ſymptomatic of eruption and ſuppuration. This diſpoſition to ſkin was not univerſal, ſome of the puſtules ſtill continuing to extend in the manner before deſcribed. They were however few, unattended with pain; and the new ſuppuration, inſtead of extending round the whole ſcab, was confined to an inconſiderable portion of the edge. On removing any of the ſcabs, a fungus, covered in ſome inſtances by a thin cuticle, was found ſhooting out of the foveolus, that had been the ſeat of the ſlough.

The ulcer on the throat had made ſuch ravages, that I was fearful the whole uvula would be deſtroyed. The left ſide was entirely loſt, and what remained, inſtead of hanging in its natural form, was drawn by its muſcular fibres to the arch formed by the right tonſil. The

voice was as much affected as when the uvula is loſt by a venereal ulcer. As the other ſymptoms abated, however, the throat recovered nearly its original figure, and the voice its natural tone. Though the violence of the fever had now ſubſided, yet it returned occaſionally, and was conſtantly attended with a new ſuppuration in ſome of the puſtules, or rather at a ſmall point in the edges of ſome of them. The paroxyſms laſted, at intervals, for three or four days; during which, however, the appetite continued, and, at the remiſſions, was that of a convaleſcent. At the end of ſix months from the firſt ſymptoms of fever, and four from the eruption, moſt of the puſtules, particularly thoſe on the legs, and many about the body, had ſcaled off, the throat was nearly well, and this ſucceſſion of ſymptoms was to be aſcribed to the reſources of the conſtitution, which was only ſupported, without any attempt at altering its actions.

I was unacquainted with yaws but by deſcription, and my patient had been ten months abſent from the Weſt Indies before he felt any indiſpoſition. During his ſtay there, all he recollected that might have expoſed him to the diſeaſe was, that being once with a phyſi-

cian,

cian, who was viſiting the ſick negroes of a plantation, he was deſired to keep at a diſtance from one of them. It was therefore fortunate, that enough of the puſtules ſtill remained in a ſtate of partial ſuppuration, to ſatisfy Dr. Wright, who at this time touched at our iſland in his return to the Weſt Indies, that the diſeaſe was truly yaws. As it was of the moſt violent ſpecies, the puſtules being large as well as numerous, it may be right to diſtinguiſh between ſuch ſymptoms as are peculiar to this ſtate of the diſeaſe, and ſuch as are common to all. The fever was much greater than uſual, the generality of patients ſhowing little or none; but this variety is not greater than the ſecondary ſtage of the venereal diſeaſe, which is often attended with fever, counterfeiting the intermittent. This ſometimes goes off as the eruption appears, and ſometimes the eruption is preceded by no fever. The ſpaſm on the fauces muſt be conſidered as an accidental circumſtance. The diſeaſe does not uſually attack the throat, but inſtances of it are mentioned *. I have before remarked, that its appearance no way differed from the venereal ulcer on that part.

* See Hunter's Treatiſe on the Venereal Diſeaſe, p. 383.

The

The ſurrounding inflammation was indeed more conſiderable, continued longer, and the pain was much greater. The following I conſider as the genuine character of the diſeaſe, by which it may be diſtinguiſhed from all other morbid poiſons.

I have already remarked the figure of the puſtules in their early ſtage. If at this time the cuticle is taken off, you find under it a rough whitiſh ſurface, conſiſting partly of ſlough, and partly of living animal matter. This I conjecture, becauſe, on the cloſeſt obſervation, the pus appeared formed over the ſurface, and not at the edges only. Where the cuticle is left, the matter uſually puſhes out at the extremities, but ſo ſlowly as only to harden upon it. Suppuration is not conſtantly going on in any of the puſtules, excepting where the inflammation is very high, as was the caſe in the face. In other parts, ſome puſtules appear to ſuppurate at one time and ſome at another, but commonly ſeveral at the ſame time. Hence the drying and hardening of a ſcab is no criterion that ulceration has ceaſed, and that the part will ſkin. Even the ſame individual puſtule will heal in one part while it ſpreads in another.

From

From the time, however, that the ſcabs begin to dry, may be called the ſecond ſtage of the diſeaſe; and if at this time you break off the ſcab, you find a red fungus ſhooting up under it.

There were no pits left after healing in any part but the face. In theſe the inflammation was ſo violent, and the matter ſo thin, that, inſtead of hardening under or upon the cuticle, it proved more than any ſuperficial dreſſing would abſorb. Hence, inſtead of a ſcab we had an open ſore, and inſtead of a fungus ſhooting up, the part ſkinned over, without any previous granulation. This is analogous to what I have obſerved in ſmall-pox, and all other morbid poiſons *.

To give the character then in as few words as poſſible:—If in the early ſtage of the puſtule you remove the *cuticle*, you are to expect a ragged but moiſt ſlough. In a later ſtage, if you remove the *ſcab*, you will find a fungus, varying in ſhape, ſize, and colour, according to the period of the yaw. Where the inflammation is very high, you will neither have ſcab nor fungus; but when ſup-

* See Morbid Poiſons, p. 117.

puration

puration ceaſes, the part will ſkin over, and leave a pit.

Authors have generally remarked, that all the hairs near the yaws turn white. This was not permanent in my patient. He had indeed no hairs near any of the puſtules that granulated. On the face, where pits remained, the hair was not renewed for more than two months. The few that then grew were of the natural colour. I have already remarked ſome appeared white, from being covered with pus. Theſe were about the eye-brows, and recovered their colour on being waſhed. This patient had the fair complexion of the natives of a northern latitude. It is probable that, in darker people, the hair may turn white, as we know it ſometimes does after cicatrices from common wounds in the head, and as frequently happens in the black hair of other animals.

Having thus deſcribed the character of the diſeaſe, I ſhall offer a hiſtory of it, founded on obſervation, and leading to practice.

1ſt. The violence of the diſeaſe muſt be in proportion to the ſuſceptibility of the conſtitution for it.

2d. When

2d. When the fusceptibility is great, it is likely to be proportionably permanent, and, as long as it continues, the matter of each puftule will infect thofe parts it comes in contact with. Hence the fpreading of the fame individual puftule or fcab.

3d. That nothing will deftroy the fufceptibility of a part, or the whole conftitution, but its full action. Hence,

4thly. Though the action may be fufpended for a time, by exciting a different action, yet, the fufceptibility ftill remaining, the action will return as foon as that which fuperfeded it ceafes.

To illuftrate this theory the better, I fhall contraft yaws with the only two morbid poifons to which it bears any analogy, without exactly refembling either.

The venereal is a poifon of which the conftitution is for ever fufceptible, and which it has no power of curing in itfelf: confequently the matter from every ulcer affects the contiguous parts, and the difeafe is kept up for ever, or till a more powerful ftimulus is applied; after which, on a frefh application of the infection, the conftitution is found as fufceptible as before.

The

The ſmall-pox is a poiſon of which the conſtitution is no longer ſuſceptible, after having gone through a certain fever and eruption, occaſioned by the application of its poiſon. Conſequently, from this time, the contiguous parts being inſenſible to the variolous irritation, all the puſtules heal without ſpreading, and the conſtitution is found to have loſt its ſuſceptibility on a freſh expoſure to the infection.

Of yaws, on the contrary, the conſtitution remains ſuſceptible after the eruption and fever (if any happen to attend it) are completed. Hence, as in the venereal, the pus affects the contiguous parts. But this ſuſceptibility only continues for a time, uncertain according to the difference of conſtitution, or ſtate of it at the time. When the ſuſceptibility ceaſes, the parts heal as in the ſmall-pox, though more ſlowly, from the ſlow progreſs of all the other actions. When healed, the conſtitution has for ever loſt its ſuſceptibility for the diſeaſe.

In one point they all agree, namely, that they may be ſuſpended for a time by another more powerful ſtimulus, but will ſhow themſelves as ſoon as the effect of that ſtimulus

 ceaſes.

ceases. When it happens that the constitution is infected by absorption from a local venereal ulcer, the consequent disease will never show itself while the mercurial irritation which cured the chancre continues; but when that irritation ceases, the disease will appear in the skin, fauces, or bones *.

In the small-pox, inoculation has taught us, that, after the infection is received by a constitution susceptible of its impression, the disease may be for a time superseded by some other irritation, most commonly an erysipelatous fever, or the measles. As soon, however, as these cease, the small-pox resumes its action, and continues its course.

In yaws, the progress of which is particularly slow, it appears that, even after the disease has proceeded to suppuration, it may be superseded for a time by mercury. But if that remedy has been applied before the full action of the disease, namely, scabbing, has taken place, whenever the mercurial irritation ceases, the yaws resume its action, which

* As this rests on a long deduction of facts and reasoning, the reader who has not previously studied the subject must be referred to Hunter on the Venereal Disease, p. 305, and Morbid Poisons, p. 235, & seq.

it

it continues as long as the conſtitutional ſuſceptibility remains.

To conclude, the conſtitution is always ſuſceptible of the venereal poiſon; ſo that the diſeaſe will ſpread till ſuperſeded by a more violent irritation; and return on a freſh application of the poiſon. The ſmall-pox will cure itſelf as ſoon as the ſuppurative fever is over; and, with the diſeaſe, the ſuſceptibility for it is extinguiſhed for ever.

In yaws the ſuppuration, whether attended with fever or not, does not immediately relieve the conſtitution from its ſuſceptibility to the diſeaſe: nor is there any remedy yet known that will cure it. But this ſuſceptibility ceaſes by degrees, after which the parts heal, and the ſuſceptibility never returns.

Though only the venereal is abſolutely incurable, excepting by a remedy, yet all three may be arreſted, at certain ſtages, without being cured.

That ſuch is the nature of yaws, appears from every authority I have been able to find, and from my own obſervation. The anonymous and modeſt author of a paper in the Edinburgh Medical Eſſays, Dr. Hillary, and Sauvage, all agree, that if mercury is given

before

before all the yaws are ſcabbed over, the beſt that can happen is a return of the diſeaſe when the mercurial irritation ceaſes; but all of them, as well as Mr. Hunter, mention very calamitous events that have ſometimes followed the early exhibition of mercury. The two firſt mentioned writers (the only two practical ones) never ſeem to have left the diſeaſe to its natural cure, and differ much in their opinion of ſuch a practice. Hillary, with his uſual haſtineſs conceives it would always kill the patient; but the other has the modeſty to believe it would probably get well of itſelf, though he never had the courage to try. Both agree that, after ſalivation, ſome of the yaws will obſtinately reſiſt, and that it will be neceſſary to rub them with cauſtic to the bottom.

Such was the exact progreſs of the diſeaſe with the Count, to whom mercury might be ſaid never to have been exhibited, or to have been exhibited ſo ſlightly, as to produce no effect. When the ſcabs began to fall off, they continued to do ſo, ſeveral every day; but, on the arms, ſome remained, which it was found neceſſary to rub with cauſtic. Even theſe would ſometimes ulcerate afreſh

Perhaps they were not ſufficiently cauterized. They were at laſt left to themſelves, and healed ſpontaneouſly.

I ſhould be unwilling to fix a practice from any ſingle inſtance: but the preſent caſe, by the accounts of all the authors above referred to, and by Dr. Wright's authority, healed earlier than is uſual, where the puſtules are ſo numerous *. I ſhall, however, not ſcruple to give it as a general caution, in all caſes of ulcer or eruption, whether proceeding from morbid poiſons or not, never to give mercury till the diſeaſe explains itſelf. Should it prove venereal, the remedy cannot be too ſoon exhibited. Should it prove a morbid poiſon of a different kind, it would be adviſeable to wait as long as we can with prudence, to ſee whether the diſeaſe is within the powers of the conſtitution, in which caſe it may be beſt to interrupt it as little as poſſible. If, on the contrary, we ſee no diſpoſition to heal, and the diſeaſe rapidly gaining ground, though we cannot find a remedy more likely to ſucceed

* About thirty weeks from the commencement of the eruption.

than

than mercury, it ſhould be given with great caution.

I cannot conclude this paper, perhaps already too long, without an enquiry whether the leproſy of the Jews was yaws or not. In theſe remarks I ſhall confine myſelf to the Vulgate, as much more pointed in characteriſing the diſeaſe, though there is nothing in the Septuagint that contradicts it.

"When," ſays the divine lawgiver *, "a man ſhall have a riſing, a ſcab, or a bright ſpot;" this conſtitutes the early ſtage, when the pimple is juſt forming, or the cuticle broken off, ſo as to diſcover the ſlough underneath, ſplendid from the exudation of a ſmall quantity of matter, or when the matter begins to harden into a ſcab. In the ſecond ſtage, viz. when the loſs of the cuticle and contraction of the ſlough has ſhowed a depreſſion, ſo that the "plague was deeper than the ſkin," and the matter had encruſted the "hair, ſo as to turn it white," the diſeaſe was conſidered as beyond a doubt, and the ſubject pronounced unclean. But if no loſs of ſubſtance appeared, and the ſpot was not lower

* Levit. chap. 13.

than the ſound part, nor the hair altered, the ſubject was to be ſhut up for a week, at the end of which, if the diſeaſe was ſtationary, ſeven days more were required. If the diſeaſe now became a dry ſcab, of a darker complexion, without having ſpread, it was to be conſidered a common ſcab, and the ſubject re-admitted into the camp. But if the ſcab had increaſed between the firſt and ſecond examination, the ſubject was to be again ſecluded for a future examination, and if it then appeared that the ſcab continued to ſpread, he was to be pronounced unclean.

In the next ſtage, the excreſcences being all white, and the hair alſo, the prieſt was directed to look for the red fungus underneath, and, if he found "quick raw fleſh in the riſing," he was to conſider the diſeaſe an old [or confirmed] leproſy, and exclude the patient accordingly.

Laſtly, he was to determine when the patient might be conſidered as no longer infectious, and re-admitted into the camp. For this purpoſe every part of the body was to be examined, and if all the cicatrices were covered with a new cuticle, which, in this caſe, will be opake and "white," the ſubject

was

was to be declared clean; but if any of the fungus fleſh remained uncovered, or covered only with a thin tranſparent cuticle (in both which caſes the appearances will be that of "raw fleſh"), the prieſt was directed to ſeclude the ſubject, till, on a future examination, every part appeared white, and then, after the neceſſary ablutions, he was to be readmitted into the camp *. The reſt of the paſſage relates to an old cicatrix, or an open ſore of any kind, becoming the ſeat of a leprous puſtule.

The above deſcription exactly reſembles yaws, and no other diſeaſe now known, in every material point: in the veſicle, or puſtule; in the depreſſion from the loſs of the cuticle, and the contraction of the ſloughy part beneath; in the ſubſequent fungus; in the diſpoſition of the ſcab to ſpread; in the changing the hair to white; in the infectious property of the diſeaſe; in the ſlowneſs of

* Dr. Mead ſuppoſes, that this laſt paſſage, ver. 12. and 13. relates to a different diſeaſe: but there is no foundation for ſuch an opinion; and whoever carefully compares Dr. Mead with the text, will be convinced of the fallacy of the doctor's arguments.

its progreſs; and, laſtly, in the conſtitution being equal to its cure. In moſt of theſe it differs from the Arabian leproſy (a diſeaſe well known in the iſlands), and, in many particulars, from the *lepra grecorum.*

It is moſt probable, by the prudent meaſures purſued during the long march through the wilderneſs, that the yaws was altogether extirpated from the Jews before their arrival in Paleſtine. For though leproſy is ſpoken of in other paſſages, it was evidently a different diſeaſe. The caſes of Moſes and Miriam are not to our purpoſe, as they were both antecedent to this event. The caſe of Naaman (2 Kings, chap. v.) was evidently different. Firſt, it was incurable by any human means, or by the powers of the conſtitution. Next, the univerſal whiteneſs, which was conſidered as a ſymptom of recovery from the former diſeaſe, appears in this to characterize its worſt ſtage. For, after the malediction of the prophet, his ſervant "went out a leper, as white as ſnow." Thirdly, this diſeaſe does not appear to have been infectious; elſe Naaman would not have ſpoken of the King his maſter as "leaning on his hand" (by which

which he muſt at leaſt have been near his perſon), when performing his devotions, or "worſhipping in the houſe of Rimmon." Laſtly, there is no intimation that Naaman's wife, or any of his family, were infected, or that his ſervant was apprehenſive of being ſo.

It is however probable, that the two diſeaſes, having the ſame name, might be confounded, and, when one of them had diſappeared, the other might continue to be treated like the former. For though it ſtill remains a doubt, whether the Arabian leproſy be infectious, and is a matter of certainty, that, if at all, it is very little ſo, yet that it is often hereditary, is univerſally allowed. For theſe reaſons, probably too on account of the miſerable appearance of ſome of the ſufferers, it is the policy of moſt nations inhabiting warm climates, to exclude them from ſociety. On this account probably it was, that the prophet did not go out to Naaman, but ſent him a meſſage into the ſtreet. For the ſame reaſon he might not permit his ſervant to accept the ſmalleſt preſent; and, when he found that he had deceived him, pronounced the curſe

 on

on him, and "his ſeed for ever." This may appear a cruel ſentence: thoſe who think ſo ſhould conſider the puniſhment inflicted on the culprit as neceſſarily implying a diſpoſition to the ſame diſeaſe in his progeny. But a careful examination of the paſſage will at once ſhow, that the puniſhment was confined to the culprit. "Is this a time (ſays the prophet, alluding to the diſtreſſed ſtate of the country) to receive money and garments, and olive yards, and men ſervants and women ſervants."—But, perhaps, you look forward to a more ſettled ſtate of things. "The leproſy of Naaman cleave to thee and thy ſeed for ever." Go, you have a diſeaſe which will exclude you from that intercourſe with the world, by which only you could enjoy your ill-gotten wealth; nor can you expect your poſterity to inherit it, as the law will preclude you from having any.

Of the four lepers mentioned at the ſiege of Samaria *, we have no deſcription. We find, however, that they were excluded from the city, and probably overlooked during the general diſtreſs. In this ſituation they re-

* 2 Kings, chap. vii.

ſolved

ſolved to offer themſelves to the enemy; which they did about twilight. Thoſe who have ſeen the worſt ſtages of the Arabian leproſy, need not be told how horrible the countenance appears. It is well known, that the round eyes, flat noſe, red tuberculated viſage, exhibits ſo much the aſpect of a lion, that the diſeaſe has been called *leontiaſis*, as that on the leg and foot has been denominated *elephantiaſis*.

Four ſuch objects as theſe appearing by uncertain light, unarmed, and without any of that hurry or agitation which attend deſerters, might, in thoſe days, very naturally ſuggeſt, to the outpoſts, the idea of ſupernatural agency; and, when the panic once became general, different reaſons would be aſſigned for it in different parts of the camp. I ought to remark, that there is nothing in this that invalidates the teſtimony of miraculous agency; the only unequivocal proof of which, as an ingenious and learned writer obſerves, is prophecy. Nothing leſs than inſpiration could have taught Eliſha, during a time of univerſal diſtreſs, that, on the following day, every thing would be abundant,

or

or the fall of the nobleman who doubted the truth of ſuch a prediction. Thus the miracle is quite as complete, though leſs complicated; nor is this ſtatement any way contradicted by the written account.

The leproſy of King Uzziah *, appears alſo to have been incurable; for, immediately on its diſcovery, a ſucceſſor was appointed; and we are told that the diſeaſe continued, and he lived in a ſeparate houſe during the reſt of his days.

* 2 Chron. chap. xxvi.

ARTICLE XI.

A Caſe of an Extra-uterine Fœtus.

By A. FOTHERGILL, M.D. F.R.S. &c.

READ, MARCH 16, 1801.

Sunt lachrymæ rerum et mentem mortalia tangunt. VIRG.

SOME time ago, Mrs. Gunning, a middle aged woman, an inhabitant of the environs of Bath, conſulted me on the nature of her caſe, concerning which ſhe had had the opinion of various medical practitioners, and had taken ſundry medicines without obtaining the ſmalleſt relief. The abdomen was greatly enlarged, particularly on the left ſide, attended with total loſs of appetite, great thirſt, conſtipation, teneſmus and frequent vomiting; urine very ſcarce and high coloured.

She had for many months undergone ſevere lancinating pains in the umbilical and left hypochon-

pochondriac region, darting through the ſmall of the back, and returning at ſhort intervals. Theſe ſymptoms had increaſed ſo much of late that every effort to paſs urine or ſtools, or to change her poſture, gave her unſpeakable torture. Her pulſe hard, depreſſed and unequal, upper and lower extremities greatly emaciated, ſkin flaccid, countenance pallid, and expreſſive of the utmoſt diſtreſs.

As ſhe had been married many years without ever having had a child, as her catamenia had diſappeared about ſixteen months ago, and being now in the forty-ſeventh year of her age, it was naturally ſuppoſed it could not be a caſe of pregnancy, eſpecially as the os uteri had teſtified no ſuch ſign during the pains, and the uſual period of uterogeſtation had ſo long elapſed. It was therefore generally concluded that the diſeaſe under which ſhe laboured muſt be a dropſy of the encyſted kind, particularly of the *ovarium*. The ſymptoms however not according well with my idea of that, or any other ſpecies of dropſy, I reſolved to examine more minutely into the caſe. Though an obſcure fluctuation could be felt, yet the tumor was not ſo much cir-

cumſcribed as in a dropſy of the ovarium, preſented a more unequal ſurface, extended more towards the oppoſite ſide, and occaſioned more pain on being preſſed. I next proceeded to inquire whether, within the firſt month from the ceſſation of her menſes, ſhe had not felt an unuſual ſenſation accompanied with nauſea? Whether the abdomen did not afterwards begin to enlarge and increaſe gradually? Whether the breaſts in the ſubſequent months did not begin to grow turgid? Whether a ſerous fluid did not afterwards ouze from the nipples? And finally, whether, near the cloſe of the ninth month, ſhe did not feel acute pains about the region of the womb, of a different kind from any ſhe had experienced before, and attended with a ſenſe of preſſure and bearing down? To all which ſhe anſwered in the affirmative.

From this view of the caſe, with all the concurring circumſtances, I ventured to declare my full perſuaſion concerning the actual preſence of a child in the abdominal cavity, though not in the womb. Having privately informed her huſband concerning the hopeleſs ſtate of the caſe, of the impoſſibility of deliver-

delivering her without haſtening her end, which indeed ſeemed faſt approaching, I hinted that the only chance remaining was the diſſolution of the child by putrefaction, and its being afterwards diſcharged piecemeal by one of the natural outlets, or by an abdominal abceſs—a circumſtance demanding extraordinary efforts of nature, rather to be hoped for than expected in the preſent caſe.

Convinced that nothing could be attempted beyond the palliative plan, I endeavoured to ſoothe the vehemence of her excruciating pains by a liberal uſe of opium, internally and externally, by the tepid bath, and by embrocating the abdominal region with warm camphorated oil. By theſe means, and by gradually increaſing the opium till ſhe took two drams a-day, the ſeverity of her ſufferings was conſiderably mitigated. At length, a ſudden diarrhœa came on, accompanied with a very profuſe diſcharge of a mixture of blood and ſanious matter, highly offenſive. The urine began to flow copiouſly, and the ſwelling of the abdomen, ſuddenly ſubſided to its natural pitch. All the ſymptoms abated and ſhe enjoyed a temporary truce. Having now reach-

ed the cloſe of the ſeventeenth month of her pregnancy, being worn out with a long ſeries of inſupportable ſufferings, what ſhe had often wiſhed for at length arrived, and ſhe calmly yielded to her fate.

Her death happened in Auguſt laſt, during my abſence in London. On my return, I found the body had been opened by an able ſurgeon, according to her own requeſt made ſome months before. The uterus was found nearly in its natural ſtate without any viſible ſign of impregnation; behind it was found almoſt the entire ſkeleton of a full grown child, part of the bones had perforated the rectum, and the reſt, by their preſſure, had rendered the lumbar vertebræ quite carious. The urinary bladder was conſiderably thickened and contracted in its dimenſions, the reſt of the viſcera did not, it ſeems, appear materially altered.

REMARKS.

1. Intricate as the preſent ſubject is, it may poſſibly admit of ſome elucidation. In the myſterious proceſs of generation, whether the ſeminal fluid be conveyed to the *corpus luteum* by

by abſorption, or only the animating *aura* exhaling from its more ſubtile parts, we need not at preſent contend, becauſe the act of conception ſeems always to take place in the ovarium alone. In the critical moment of impregnation, it ſometimes happens that by ſome unlucky incident the ovum, inſtead of being conveyed into the uterus ordained for its reception, attaches itſelf to the inner coat of the ovarium, or of the Fallopian tube, or of the abdominal cavity; where, like a paraſitical plant, it takes root and arrives at maturity. Thus the germ of the miſletoe, when deprived of its favourite oak, readily attaches itſelf to a neighbouring thorn; and thus the ſpur of the game cock is ſaid to have been transferred to his head, and, by a curious though whimſical experiment, engrafted on his comb.

2. Extra-uterine pregnancy being very obſcure in its nature, demands minute inveſtigation, otherwiſe it is liable, as we have ſeen, to be miſtaken for a dropſy of the ovarium; but it may neverthelefs be diſtinguiſhed by due attention to the hiſtory of the caſe, and the ſigns already mentioned, and particularly by

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its being attended with more intenſe pain and more formidable ſymptoms, except in certain rare inſtances, where the fœtus, enveloped in a gypſeous incruſtation, without exciting inflammation or ulceration, has lain dormant many years without being diſcovered till after death.

3. But when the fœtus burſts from its incloſure in the ovarium or Fallopian tube, and increaſing in bulk, acts by irritation and mechanical preſſure, it deranges the female œconomy, injures and erodes the adjacent parts, and it cannot but produce exquiſite pain and miſery. This, in the preſent unhappy caſe, may account for the eroſion of the vertebræ, the ulceration of the rectum, the contraction and thickening of the bladder, the difficulty of urine, the putrid ſtools, the violent teneſmus, &c.

4. The diſturbance occaſioned by the extra-uterine fœtus prompts Nature to exert all her powers to expel the unwelcome intruder. In a few rare inſtances ſhe happily ſucceeds, but far more frequently fails in the attempt, and the violence of the conflict proves fatal both to the embryo, and its mother. At the uſual period of delivery, ſhe calls forth all the

 energy

energy of the uterus in producing ſtrong labour-pains. Theſe proving fruitleſs, ſhe tries to diſſolve the extraneous body by putrefaction, and by ſubſequent ſuppuration to form a convenient opening for its complete expulſion. At other times, ſhe encaſes it in a ſtoney incruſtation, which preſerves the embryo, and protects the neighbouring organs from putrefaction.

5. It may not be improper to add that, in certain difficult labours, the gravid uterus is accidentally ruptured, and the fœtus eſcapes into the general cavity. This dreadful accident is known by the exquiſite pain it occaſions, and by forcing from the unhappy ſufferer a loud ſhriek. The labour-pains inſtantly ceaſe, a profuſe flooding enſues, followed by cold ſweats and ſyncope. In this critical ſituation, ought delivery (according to the common practice) to be immediately undertaken though the os uteri be not properly dilated? Or ought we not rather to wait for that event? Does not the immediate ſtop put to the labour-pains point out the propriety of this? That eminent acoucheur, Dr. Garthſhore, in his elaborate paper in the 8th vol. of the London Medical Journal, mentions no leſs than ten caſes of this kind, wherein he

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had been confulted; and obferves, that moft of thofe have died where the delivery was haftily undertaken, and that many have recovered when left entirely to nature. Whence it may be alfo inferred, that fuch deplorable accidents are neither fo uncommon, nor yet fo conftantly fatal as is generally imagined. If many furvive a rupture or laceration of the uterus, it furely affords no mean argument in favour of the Cæfarian operation, unlefs it can be proved, that a lacerated wound is lefs dangerous, and heals more kindly than one performed by a very fharp inftrument. Bianchi relates a remarkable cafe of a woman who became pregnant, at three different periods, of three feparate extra-uterine children, all which died in the early months of pregnancy, became putrid in the body, and were all extracted through an ulcer in the umbilical region. The woman, he adds, not only recovered completely, but became fruitful afterwards.

M. Tenon, eminent for his long experience, affures us that in *all* extra-uterine cafes, and in the greater part of thofe where the child has burft either wholly or partially *through the*

 uterus,

uterus, the French accoucheurs conſtantly extract it through the divided parietes of the abdomen; conſidering this as by much the ſafeſt practice. He adds that the Cæſarian operation is much leſs ſucceſsful in this country than it is in France, becauſe we defer it too long; and he further aſſures us, that ſince their firſt practiſing this operation, in the time of Bauhin, ſeventy-eight women have been ſaved by it at the Hotel-Dieu of Paris. It moreover appears, that this is the preſent method of practice, not only in France, but in Germany, and the Low Countries, eſtabliſhed, on what is conceived to be the ſure teſt of experience, and declared to be the only means of ſaving both mother and child.

In the 2d volume of Memoirs of the Medical Society at Paris, we have an account of two ſucceſsful Cæſarian operations, and in the Journal de Medicine for Auguſt 1786, of the total extirpation of the uterus. If we may credit theſe reports then, the Cæſarian ſection is not neceſſarily ſo fatal as ſome have been led to imagine. To conclude. Since thoſe unfortunate caſes of extra-uterine pregnancy can neither be foreſeen nor prevented, much leſs remedied when known, by any means ſhort of this operation,

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it becomes an object worthy the serious consideration of our English practitioners, whether the chance this may give of a cure, may not be greatly preferable to that long protracted misery and distress which the unfortunate sufferer inevitably must undergo from her extra-uterine burthen; should she even be successful enough to survive its expulsion piecemeal through the parietes of the abdomen, or by the intestinal canal.

Bath, October 24, 1800.

ARTICLE XII.

A Case of inverted Uterus after Parturition.

By THEOPHILUS DYSON, SURGEON, F.M.S.

READ, MAY 11, 1801.

EARLY on the morning of the firft of January laft, I was called to attend the wife of Mr. N. in the city. She had been brought to bed about an hour before of her eighth child. The midwife who had delivered her of all her children informed me, that fhe had had a good natural labour, as ufual, but that fhe found the placenta adhering fo firmly as to induce her to defift from any further effort to extract it, without calling in profeffional affiftance. I found the patient, who was about thirty-fix years of age, (a fhort made woman, rather corpulent and of a fanguineous habit) low and faint, with a feeble pulfe. There had been a good deal of hæmorrhage. I ordered her to have a draught of porter, and

fat

ſat down to examine what ſtate ſhe was in. Although ſhe had felt no pains for ſome time to aſſiſt the expulſion of the placenta, it was protruding conſiderably into the vagina. The funis was yet firm; I therefore urged with gradual force to extract it without introducing the hand, in which I very ſoon ſucceeded. I obſerved it to be the thinneſt and moſt expanded I had ever met with, much reſembling a pancake, and apparently having embraced the greater part of the internal cavity of the uterus. My patient now complained of great pain, as if ſomething was ſtill forcing from her. I was about to introduce my hand into the vagina, to bring away any coagulum or detached ſubſtance, which I ſuppoſed might cauſe this uneaſineſs, when it was preſently met by a firm round body of conſiderable ſize, the nature of which I did not immediately comprehend: a few minutes more examination, however, convinced me that it was the uterus inverted; for by carefully gliding my hand around the ſubſtance thus protruded, I found that the *cervix uteri*, now become the *fundus*, as it were, entirely excluded all farther progreſs of my hand up the vagina. There was now very little hæmorrhage.

rhage. The after-pains continuing, rendered the body of the uterus ſo firm and reſiſting that I did not attempt to replace it for near a quarter of an hour. By this time the pains ſubſiding, I cloſed the fingers of my left hand into a pyramidal form, and thus applying them to the central, and depending part of the inverted organ, gently puſhed the hand upwards, and without any difficulty readily returned the uterus into its natural and priſtine ſtate.

The patient became immediately eaſy, had no ſeverer after-pains, nor greater lochial diſcharge than uſual; but recovered as well as after any of her former labours, and without any particular complaint during her confinement.

THEOPHILUS DYSON, Surgeon.

London, March 28, 1800.

Mr. Dyſon begs leave to add, that ſince the above caſe was drawn up, and read before the Society, he has attended the delivery of Mrs. N. of another child on the 31ſt of Auguſt laſt. The labour was quick, but the placenta ſlow in coming down, and preceded by very conſiderable hæmorrhage, which indeed

deed occurred on every former ſimilar occaſion. After about an hour's moderate endeavour for extraction, without introducing the hand, the placenta came away whole, of the ordinary dimenſions and thickneſs; the uterus remaining in its proper poſition.

New Baſinghall ſtreet, 10th Sept. 1801.

ARTICLE XIII.

An Account of an extraordinary Mass of Disease found in the left Cavity of the Thorax.

By J. CARDEN, SURGEON to the WORCESTER INFIRMARY, &c. F.M.S.

READ, MAY 25, 1801.

UPON removing the sternum and cartilages of the ribs, in the exposed space was seen a white fatty-looking substance, which concealed the heart and lungs. It extended over most of the left cavity of the thorax, and a little beyond the edge of the sternum, on the right side, adhering most firmly to the pleura costalis. The heart was completely excluded from the left side of the thorax, its apex, (the basis and apex lying in their usual direction) not quite reaching the right edge of the sternum; the left lung was compressed to the size of half a small hand, and the diaphragm on its left side and center, protruded towards

towards the abdomen in a deep pouch. Underneath the white ſubſtance, and ſeveral inches from its ſurface, lay a conſiderable quantity of ſerum and coagulated blood, contained in a cyſt. The cyſt was ſmoothly lined, compoſed of layers of a browniſh coloured lymph, and and covered exteriorly by a thin white capſule. The blood conſiſted of numerous diſtinct lumps. At the poſterior part of the cyſt, and inſeparably connected to it, lay the left lung, which had ſuffered no other alteration than its reduction in ſize, and the loſs of its ſpongy texture; and its pleura was not thickened. In the poſterior part of the left cavity of the thorax, and firmly adhering to it, was a maſs of tough coagulated lymph, of a brown colour, and laminated ſtructure, nearly equal in ſize to the half of a ſound lung. The pleura coſtalis of the left ſide was thickened. The right lung was reduced in ſize proportionally to the encroachment ſuffered by the right cavity of the thorax, it was perfectly ſound in its ſtructure, and the only mark of diſeaſe in this ſide of the thorax, was a ſmall elongated adheſion between the pleura pul-

monalis and coſtalis. The heart appeared ſmall, but preſented no mark of diſeaſe in any part of it. The aorta and venæ cavæ were in a natural ſtate. The right branch of the pulmonary artery, was ſomewhat contracted in its capacity, and its coats were diminiſhed in thickneſs. The left branch was ſo diminiſhed in ſize, that its diameter was a third leſs than that of the right branch, and its coats, reſembled thoſe of a vein. The left pulmonary veins were very much dwindled. No trace of any rupture of veſſels appeared in any part of the left cavity of the thorax.

The abdomen contained about two quarts of brown ſerous fluid, and there were marks of ſlight inflammation in the lower part of the ſmall inteſtines, and ſeveral very conſiderable contractions in the colon, without any alteration of ſtructure in the contracted parts. The left lobe of the liver was thruſt conſiderably forwards and downwards by the protruſion of the diaphragm, ſo as to be thought, from feeling it externally, to be much enlarged.

The ſubject of the diſeaſe, was a tall robuſt man, aged thirty, who, upon the day of his

admiſſion into the Worceſter infirmary, expired ſuddenly as he was walking along the ward. His face and legs were anaſarcous, and he breathed with difficulty. He had not been under the care of any medical practitioner, ſo that an account of his illneſs could be got only from his wife. He had been ill at leaſt a year, having a cough, pain in the left ſide, and a ſhortneſs of breath, very ſlight for ſome time. His appetite did not fail till a week before he died, and his ſtrength was ſo little impaired, that he was able to follow huſbandry work till within ten weeks of his death. His complaints were twice much increaſed, by waſhing ſheep, and getting in hay during a flood. In the laſt month of his life, his legs began to ſwell, his urine was ſcanty, he was coſtive, had pain in the bowels, and his belly was very ſore to the touch. A fortnight before his death, his face became bloated, and he had mild delirium at night. He complained of feeling a great load in the left breaſt, but never noticed his heart's beating on the right ſide. He preferred leaning over the back of a chair to any other poſture, and could ſwallow his food better in this attitude.

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From the degree of ſtrength which the ſubject of this caſe poſſeſſed for ſo conſiderable a time, during the progreſs of the diſeaſe, it would appear that little irritation was given to the ſyſtem by the diſeaſed action which produced the tumour. It was not till the laſt month of the man's life, that his legs became dropſical, and his face became ſo only in the laſt fortnight, though the returning blood and lymph muſt have been liable long before that time to great obſtruction, from the ſituation and ſize of the tumour. The water in the abdomen was probably produced by inflammation. The white ſubſtance, which formed the principal part of the tumour, and would ſeem to have been a particular form of coagulated lymph, had a very greaſy feel and appearance, but on boiling it no oily particles were extracted, and it loſt entirely its fatty appearance and brittle texture, becoming tough, and not unlike boiled veal. A ſubſtance ſimilar to it, is taken notice of by Morgagni, as having been found in aneuriſms. A ſimilar ſubſtance to the maſs of brown laminated lymph, I ſuppoſe that to have been, which is termed moles quædam carnea, in a caſe related in the Sepulchretum Boneti,

lib.

lib. ii. ſect. 2. obſ. 4. addit.; and this caſe in its ſymptoms, and in the tumour being ſituated in the thorax, and proving fatal from its ſize, reſembles much the one before us. With regard to the blood (which from its conſiſting of ſeparate lumps, may be ſuppoſed to have eſcaped at different times) in not having been found to proceed from any rupture of veſſels, it is ſimilar to a circumſtance that has been noticed by Dr. Baillie in his Morbid Anatomy, where he obſerves, that "caſes have occurred, although very rarely, in which a large quantity of blood has been accumulated in the cavity of the pericardium; but where no rupture could be diſcovered after the moſt diligent ſearch, either in the heart itſelf, or in any of its veſſels."

ARTICLE XIV.

Hiſtory and Diſſection of a Caſe of inteſtinal Ulceration, with Remarks.

By H. FIELD, Sec. M.S.

Read, June 22, 1801.

A PHYSICIAN now living, highly eſteemed for his medical ſcience and publications, has juſtly obſerved that "the recital of caſes which illuſtrate the ſtate of the body in any particular diſeaſe, either by making known the appearances which take place in the patient when living, or which are found on diſſecting the body after death, and which are different from thoſe in health, is of great importance toward the improvement of medicine."

With this view I beg leave to ſubmit to the Medical Society the following caſe, which has no other claim to attention, but what is derived from accuracy of obſervation and a ſtrict attention to facts.

Mr.

Mr. G—— H———, aged thirty-four, a ſtout, well made, muſcular man, had formerly been in the army, and, having been taken priſoner by the French during the government of Robeſpierre, was thrown into priſon with a conſiderable number of his countrymen, where he remained about two years, and during that time was literally almoſt ſtarved, having, for the greater part of it, nothing but bread and water for food, and bed and cloathing very inadequate to defend him from the frequent inclemency of the ſeaſon in which he was confined. Add to which he laboured for a conſiderable part of this period under a chronic dyſentery. In conſequence of ſimilar hardſhips a great number of his comrades ſunk, but, by the aid of a remarkably good conſtitution, he happily ſurvived, and at length returned to his native country. For the ſpace of two or three years after this, he appeared to enjoy good health, with the exception of an occaſional eruption of a dry herpetic aſpect upon his hands, and which, when it ſubſided, was followed by ſinking of the ſpirits and nervous depreſſion.

For ſeveral months previous to his death his friends obſerved him to diminiſh in fleſh; he looked unhealthy, and there was a certain melancholy upon his mind, which was very unnatural to him, as he was poſſeſſed of great fortitude, and firmneſs of animal ſpirits. During this time his body was irregular as to ſtools, occaſionally too much relaxed, but more frequently the reverſe; and he complained much of nauſea and indigeſtion; he applied for no regular medical aſſiſtance, but is underſtood about this period to have had recourſe to advertiſed medicines; he is known to have taken Dr. James's powders, Spilſbury's drops, and probably other remedies of that deſcription unknown to his friends.

About a fortnight before death, his nauſea increaſed to frequent and painful vomitings; he laboured under a diſtreſſing ſenſation of heat both in the ſtomach and œſophagus, in ſo much that nothing but the coldeſt liquids were grateful to him, and water more ſo than any thing elſe; his ſufferings both in body and mind were very great, but more from the conſtancy of his pain, than from the acuteneſs of it, the ſeat of which he always deſcribed as being in the region of the ſtomach. After a few

few days paffed in this manner, convulfive affections of the mufcles came on in various parts of the body, particularly in the face, which gradually increafed to a confiderable degree of violence; and at intervals he was very delirious. His tongue was generally dry, and of a reddifh brown hue, giving reafon to expect an aphthous eruption. His pulfe was regular, firm, and very little quicker than the natural ftate, until within three days of his death, when it fuddenly became very frequent, and proportionably weak; and thus it continued to the laft. From the Wednefday night previous to his death, he lay in a fettled ftate of comatofe infenfibility, till Thurfday at noon, and either in this ftate or in convulfions, he remained with a few fhort intervals of recollection until his death, which took place early in the afternoon of Saturday 20th Dec. 1800.

During the two laft weeks of his life, he had the beft medical advice. Emetics, laxatives, neutral falts, fedatives, veficatories, fomentations and poultices were adminiftered, but without producing more than a temporary alleviation of fymptoms. Nourifhment he fometimes took with much eagernefs, but at

 other

other times, either from inability or disinclination to swallow, he resolutely refused it. There was no material obstruction to the passage of fæces.

His body was opened about fifty hours after death. The stomach, liver, gall bladder, and spleen were perfectly sound and free from disease, as were the duodenum, jejunum, and upper part of the ileum, as also the larger intestines; but in the lower part of the ileum, immediately above its junction with the cœcum, for about the space of eighteen inches, there was found sufficient cause to account for this train of symptoms.

The external appearance of it was such as to give strong indications of great internal mischief; several indurations might be felt through the coats of the gut, which was contracted and livid, but not perforated. Upon opening the diseased part, it was found internally studded, through its whole extent, with ulcers of various sizes from that of a bean to above that of a half crown piece; circumscribed, but very rugged from a great quantity of fungous substance thrown out both upon their surfaces and edges, from all which

circumſtances it was impoſſible not to conjecture them to have been of a carcinomatous nature.

The hiſtory now recited affords two practical remarks. The one is, that diſeaſes of the abdominal viſcera can be but very imperfectly underſtood from the deſcription given by the patient of the ſeat of the pain, which was here uniformly ſtated to be in the vicinity of the ſtomach, though it will ſufficiently appear from what has been already ſaid, that this organ could not be primarily affected, but only ſecondarily from ſympathy with more diſtant parts.

The ſecond remark is, that when thoſe ſymptoms of viſceral diſeaſe, which are uſually denominated dyſpeptic, continue for any conſiderable length of time, eſpecially if they do not readily give way to the uſual tonic and corroborating plan of treatment, it may be fairly inferred, that they are not the conſequences of mere debility or irritability, but depend upon ſome more fixed and local organic affection, and therefore neceſſarily afford a more uncertain and unfavourable prognoſis.

It muſt be ſufficiently obvious from the condition of the parts as diſcovered by diſſection, that n the latter ſtage of the diſeaſe, (in whicn only medical aſſiſtance was applied for,) no human means, in the preſent ſtate of knowledge, could have afforded a rational proſpect of cure: how far the progreſs of the malady could have been arreſted by a more early application of remedies, it is impoſſible to ſay; it is highly probable that its foundation was laid in the hardſhips which the patient underwent while a priſoner in France, more particularly when it is conſidered that, for a conſiderable part of that time, theſe hardſhips were aggravated by ſo formidable a diſeaſe as the dyſentery.

I believe it will not be denied, that the appearances after death were ſuch as are not frequently to be met with. I have examined ſeveral anatomical authors, but have ſcarcely been able to diſcover a ſimilar inſtance. Dr. Baillie, ſpeaking of a ſchirrous ſtate of the ſtomach, approaches perhaps the neareſt to it of any *, he obſerves "that it very frequently happens, that this thickened maſs is ulcerated

* See Morbid Anatomy, 2d Edition, p. 143, and 173.

upon

upon its ſurface, and then a ſtomach is ſaid to be cancerous; ſometimes the inner membrane of the ſtomach throws out a proceſs, which terminates in a great many ſmaller proceſſes, and produces what is commonly called a fungous appearance;" and he afterwards deſcribes nearly the ſame circumſtances when ſpeaking of ſimilar diſeaſes in the inteſtinal canal *. Lieutaud informs us that in the diſſection of a man ſixty years of age, carried off by dyſentery, he diſcovered the internal ſurface of the colon and rectum ulcerated, ſchirrous and callous.

The deſcriptions given by Sir John Pringle, Dr. Cleghorn, and others, of diſſections after fatal dyſenteries, have but a diſtant reſemblance to the caſe in queſtion, and indeed the morbid appearances in thoſe are more uſually confined to the rectum and larger inteſtines.

If any thing is to be attempted toward preventing the occurrence of ſo alarming a train of ſymptoms, as have been here deſcribed, it muſt be by checking the progreſs of the diſeaſe in its early ſtage, at which period due diſcrimination unfortunately appears ſo diffi-

* Lieutaud Hiſt. Anatomico-Medica, Lib. 1. Obſ. 359.

cult, as to be almoſt impracticable. The following plan of treatment I ſhould conſider as affording the moſt rational proſpect of ſucceſs —frequent local bleedings by leeches or ſcarification, repeated at due intervals, interpoſing fomentations, and veſicatories, applied to ſuch part of the abdominal region as appears moſt likely to be the ſeat of the diſeaſe; and, as internal remedies, mercurials in ſmall doſes, with cicuta; keeping the body ſoluble with ol. ricini, manna, or ſome other gentle laxative. As the effect of the remedies muſt neceſſarily be ſlow, and not ſufficiently obvious to be eaſily aſcertained, they ſhould be patiently perſiſted in, both externally and internally, for a conſiderable length of time, encreaſing the quantity of cicuta as far as the ſyſtem will admit. The diet ſhould be light and of eaſy digeſtion, conſiſting of milk and farinaceous vegetables, with a moderate proportion of animal food, and a total abſtinence from ſpirituous liquors.

ARTICLE XV.

Hiſtory of a peculiar Morbid Appearance of the Heart.

By JAMES HUME SPRY, Member of the Royal College of Surgeons, &c. F.M.S.

Read, Feb. 1, 1802.

The ſubject of the preſent diſſection, was the body of a young woman ſeventeen years of age; ſhe was greatly emaciated, and of a very dark, ſwarthy, or livid colour. The ſuperior and inferior extremities, and particularly, the fingers and toes, partook moſt of this livid appearance; in the latter, it approached nearly to black.

From every part which was wounded by the ſcalpel, a very dark coloured blood was diſcharged, and it ſeemed to me that the venous ſyſtem was preternaturally loaded with blood.

In the cavity of the thorax, the firſt morbid appearance which was obſerved, was a very

very firm adhesion of the pericardium, to the pleura costalis. The pericardium when opened, was not found to contain any fluid; but the heart was remarkable, both for its great size, and weight;—to the touch, it felt extremely hard; and resisted the pressure of the hand, as if it was much distended by some elastic body.—The hardness, and distension of the heart, was found to proceed from an enormous quantity of blood, in a dissolved state, of a very deep purple colour, which distended equally both auricles, with their corresponding ventricles. The great arteries and veins likewise partook of this distension.

When the heart was carefully examined, a material defect in its organization was discovered.—The foramen ovale which is always necessary to the œconomy of the fœtus before it has respired, after birth becomes of no use, and soon closes; which event seems to be of the greatest importance to our well-doing: so that, what is perfectly natural, and indeed absolutely necessary to our existence while in utero, after birth, so far from being of use, is absolutely pernicious; and if it should perchance remain pervious, must eventually

tually be attended with fatal confequences.—In the cafe of this young woman the foramen ovale was pervious, and very nearly two inches in circumference: thus the heart was incapable of performing its functions, as it ought to do in the adult; and therefore, the blood, inftead of paffing from the right auricle into its correfponding ventricle, and from thence, through the pulmonary artery and lungs, found a more ready paffage through the large foramen ovale, into the left auricle: part, however, muft have entered the right ventricle, and afterwards have paffed into the pulmonary artery. But here again was another impediment to its paffage through the lungs. Notwithftanding the natural aperture in the fœtal heart, between the right and left auricles, through which the greateft part of the blood paffes, without flowing into the right ventricle; nature has provided a fecond, to carry off the fmall portion of blood, which will unavoidably flow into the right ventricle and pulmonary artery. This fecond provifion of nature is the canalis arteriofus, forming a direct paffage between the arteria pulmonalis, and aorta. This fecond paffage, after birth, clofes, as well as the foramen ovale: but

but nature had ſo far departed from her uſual track, as to ſuffer it to remain pervious in this young woman; hence it will appear, that with two ſuch impediments to the circulation of the blood through the lungs, it was utterly impoſſible for it to be expoſed ſo compleatly to the action of the atmoſpheric air, as to render it ſufficiently pure for the common purpoſe of life, as ordained by the Supreme Being.—When we conſider that the heart of this ſubject, was ſimilar in every reſpect to that of a fœtus in utero; and likewiſe the conſequences which will moſt probably reſult from a circulation carried on in an adult ſyſtem, through the medium of ſuch a heart; we ſhall not be ſurprized at the blue colour of her ſkin which during life was ſo remarkable as to attract the attention of the byſtanders.—The next diſeaſed appearance in the heart, was an unuſual white colour of its inner membrane, which ſeemed to be ſomewhat thicker than is commonly the caſe: this circumſtance made the columnæ carneæ appear larger than they ought naturally to be.—The lungs, upon a minute examination, were found free from any viſible diſeaſe whatever. I was led to make a particular examination of

the

the lungs, on the following account.—Where the lungs have been much obſtructed, as in ſome conſumptive patients, the foramen ovale has been found pervious: and a very reſpectable gentleman (Mr. Abernethy) has ſeen this ſeveral times; the ſame gentleman has likewiſe obſerved the foramina Thebeſii open from a ſimilar cauſe. As the lungs of this woman were viſibly free from any diſeaſe, it is not probable that the appearance of the heart depended upon obſtructed, or otherwiſe diſeaſed lungs, but was rather a primary diſorder, and moſt probably it had never ſuffered any change ſince birth. It is a very extraordinary circumſtance, that ſhe ſhould have attained the age of ſeventeen years, with a heart ſo ill calculated to perform the functions requiſite in the body of an adult: but ſhe may be ſaid to have only exiſted; for health, which is abſolutely neceſſary to our enjoying the comforts of this life, ſhe knew only by name. In the cavity of the abdomen, the liver was the only diſeaſed viſcus. Its ſize was remarkable, as it occupied nearly the whole of the right hypochondrium, and it extended over to the left, ſo as to occupy completely the epigaſtric, as well as the ſupe-

rior

rior portion of the umbilical region. The texture of the liver was firm, and its colour natural. Upon the concave ſurface there was a large tumor, which at firſt ſight ſeemed to contain matter or pus; however, this did not prove to be the caſe, but in the centre of the tumor was ſituated a tubercle of conſiderable magnitude: no other morbid part was obſerved.

It now only remains for me to give ſome account of the different ſymptoms, which this unfortunate female laboured under, previous to her diſſolution. But the inveſtigation, as I did not attend her, and as no journal was kept of her caſe by thoſe who did, has been attended with conſiderable difficulty. From her parents I obtained the following account: She had arrived at the age of ſeventeen years, without ever having menſtruated, excepting once, a ſhort period before her death. She was always from her birth remarkably dark coloured, which gradually increaſed as ſhe advanced to riper years. The colour of her face was ſo remarkable, as to make the people who looked at her, notice it: and a girl informed me, when I was inquiring about her; that, "ſhe always had *a blue face*," and likewiſe,

"that

"that her tongue was *very blue*." She had continually a very acute, throbbing pain in her head; but confined principally to her forehead and temples. She always felt a great pain, and ſenſe of weight in her left ſide, attended with conſtant palpitations of the heart. Reſpiration was performed with difficulty, and ſhe had ſometimes a very ſlight cough. Indolence was naturally to be expected, and ſhe poſſeſſed it in an eminent degree. Upon any unuſual exertion ſhe was in danger of fainting, and it was with conſiderable difficulty that ſhe got up ſtairs. Her appetite was in general voracious. The ſtate of her pulſe was not to be aſcertained. It may not be amiſs to mention, that ſome years ago ſhe took the ſmall-pox in the natural way, and ſhe had the diſeaſe ſo very ſeverely, as to have been in the moſt imminent danger.

The celebrated caſe of the blue boy, publiſhed by Dr. Sandefort, profeſſor of anatomy at Leyden, has by many been conſidered as unique; the caſe which I have related above, certainly correſponds with it in many reſpects. In order to draw the compariſon, I have extracted ſuch portion of the hiſtory, as well as diſſection, from Dr. Beddoes's obſervations

vations on ſcurvy, as is neceſſary for the purpoſe.

The ſymptoms appear to have varied very much at different times, but ſome were conſtantly obſerved; therefore, I have ſelected thoſe only. Thoſe who wiſh to be acquainted with all the different ſymptoms may be indulged in their wiſh by referring to the work above mentioned.

The ſymptoms conſtantly obſerved were,

1ſt. Great dyſpnœa upon motion; viſible pulſations in the neck.

2d. A face too full for the habit of the reſt of the body; during his laborious reſpiration a livid colour of the countenance, a protuberance, and occaſional ſuffuſion of the eyes.

3d. Urine high coloured without ſediment.

4th. Great coſtiveneſs.

5th. Conſtant chillineſs, even though the ſkin felt warm; this ſenſation never left him, except after he had become quite warm in bed. In winter, though ſitting cloſe by the fire, he complained of ſhivering, and in ſummer he longed for a large kitchen fire, and deſired to baſk in the ſun during the hotteſt part of the day.

6th. He

6th. He was ſometimes much relieved by opening medicines and by hæmorrhages from the noſe, which happened from time to time.

The tongue was very foul; the breath extremely offenſive (fœtidiſſimus).

Dr. Sandefort gives the following account of the diſſection. The thorax alone was opened.

"The pericardium did not, as uſual, appear ſurrounded by the lungs, and almoſt incloſed in them; but a maſs was ſeen to fill nearly the whole cavity, and to compreſs the lungs extremely: this maſs was the pericardium, containing the heart in a ſtate of great diſtention, and very full of blood. It reached from the diaphragm (which on the right ſide roſe to the fifth, on the left only to the ſixth rib) to the ſpace between the firſt and ſecond rib, and ſo entirely filled the lateral parts of the thorax, that only the anterior portion of the lungs on the right ſide (viz. the margin of the ſuperior and middle lobe), and but a very ſmall portion on the left (viz. towards the upper and lateral part) could be ſeen.— Above the pericardium, the ſuperior cava, with the origin of the ſubclavian veins, appeared turgid with black blood.

 "Upon

"Upon opening the pericardium, ſome water ran out; but not more, indeed not ſo much, as is ſometimes found in ſubjects where no dropſical ſymptoms have preceded death.

"The heart, when freed from its ſac, appeared exceſſively turgid, not however equably ſo; both the ventricles were not diſtended to the ſame degree; the right ventricle, as well as its auricle and ſinus, were much more enlarged, and full of blood than the left; all the veins, which ramify from the coronary veins along the ſurface of the heart, were ſo dilated, even to their extreme branches, that the moſt ſucceſsful injection could not have rendered them more diſtinct.

"The veins ariſing from the ſubclavian, more eſpecially the jugular, were enormouſly diſtended with thin black blood; the ſuperior vena cava, where it is lodged within the pericardium, did not much exceed its natural ſize; the inferior cava was enlarged; the pulmonary veins were turgid, but not exceedingly ſo; the aorta was enlarged at its origin; the pulmonary artery was remarkably contracted, from its origin almoſt to its bifurcation; of the arterious duct, or rather ligament, as it

would have been at this age, there was no veſtige.

" The lungs, externally, had no morbid appearance, but they were ſmall, compreſſed, and not eaſily dilatable; whence it appeared that they could not properly have performed their functions.

" The external appearance of the heart ſhewed where the ſource of the miſchief lay. After tying up all the veſſels, it was ſubmitted to further examination.

" The right ſinus and auricle were firſt opened; a large quantity of thin black blood flowed out. In the foramen ovale there was an aperture, which would admit a large probe.

" On introducing the finger into the right ventricle, and turning the point toward the orifice of the pulmonary artery, where it uſually ariſes from this ventricle, no ſuch orifice could be felt, but it eaſily ſlided into another, and that a very large one. But how great was my aſtoniſhment, and that of all the bye-ſtanders, when it was diſcovered, that the finger had paſſed into the aorta, which, according to the ordinary law of nature, has

no communication whatever with the right ventricle.

"This ventricle was divided in the place oppoſite to the valve, behind which the arterious orifice lies, quite down to the apex. Upon lifting this valve a little, the large mouth of the aorta appeared, as alſo a ſmooth margin, beyond which the finger found a way into the left ventricle of the heart. Upon cutting the aorta tranſverſely, at a proper diſtance from the ſemi-lunar valves, the ſame margin was ſeen to divide its orifice into two parts; the larger communicating with the right, the ſmaller with the left ventricle.

"The aorta therefore aroſe from both ventricles, and muſt have received all the blood from both.

"The pulmonary artery having been cut acroſs above the valves, theſe appeared very ſmall, almoſt grown to the artery, and covered with a granular ſubſtance, reſembling a fleſhy excreſcence, ſo that only area enough was left to ſuffer a ſmall probe to paſs into the ventricle, and even this paſſed with greater difficulty from the ventricle into the artery. Upon opening the orifice longitudinally, we found

found only two ſhapeleſs valves, partly covered with the ſame granular excreſcence.

"In the mouth of the aorta there were three valves; in the left ventricle there was nothing remarkable, except the aperture in the ſeptum, and the thinneſs of its ſubſtance, which did not exceed, and indeed ſcarce equalled, that of the right ventricle."

Although in ſome reſpects the appearances upon diſſection were different in the two caſes, yet in many other reſpects, they correſponded one with the other; and the effects produced by this mal-formation of the heart would be perfectly ſimilar in both.—The circulation of the blood in both caſes would be nearly the ſame—the larger portion of blood in Dr. Sandefort's caſe paſſed from the right auricle into the right ventricle, inſtead of paſſing into the pulmonary artery; it then paſſed immediately into the aorta; conſequently, it never entered the lungs. A ſmaller portion would likewiſe paſs through the foramen ovale, which in this caſe, though pervious, was very ſmall.—In the other caſe a greater portion of the blood would paſs into the left auricle through the foramen ovale, which was very

large; and a ſmaller from the pulmonary artery into the canalis arterioſus, and aorta. In both caſes the blood would never be ſufficiently expoſed to the action of the air of the atmoſphere to render it fit for the common purpoſes of life.

ARTICLE XVI.

A Caſe of a Wound in the Peroneal Artery, in which the Limb was ſaved by removing a Portion of the Fibula.

By THOMAS CROXALL CAM, SURGEON, BATH, LATE SENIOR SURGEON TO THE INFIRMARY AT HEREFORD.

[Communicated by Dr. FOTHERGILL.]

READ, FEB. 8, 1802.

JOHN PREECE, about eighteen years of age, had the misfortune to have the peroneal artery wounded by the point of a ſcythe in the hay harveſt, paſſing between the tibia and fibula, about three inches above the outſide ancle. The hæmorrhage was very profuſe at the time of the accident, which was ſtopped by a neighbouring ſurgeon with compreſſes of lint, and a tight bandage. As ſoon as the compreſſes and bandage became ſlack, the hæmorrhage returned. The young man being

 much

much reduced by the loſs of blood, his friends deſired I might be conſulted. I accordingly met his ſurgeon on the ſeventh day. As every thing remained quiet at that time, it was agreed that he ſhould be moved to the Hereford Infirmary, as he lived at too great a diſtance to be attended in ſuch a manner as the nature of the caſe required. Nothing happened till the fifth day of his admiſſion, when the hæmorrhage returned, and notwithſtanding the tourniquet was conſtantly applied, he loſt more blood than might have been expected. On removing the dreſſings, and looſening the tourniquet, in order to diſcover the wounded veſſel, the blood ſo immediately filled up the ſpace between the tibia and fibula, which in that part of the leg lie near each other, that it was impoſſible to uſe the needle and ligature, or apply any ſtyptic. Under ſuch circumſtances, and in ſuch caſes, where a wounded veſſel in the extremities cannot be ſecured, recourſe is had to amputation. But recollecting a note in Mr. Gooch's ſecond volume of Caſes and Remarks in Surgery, page 347, where on being conſulted in a caſe of hæmorrhage after amputation, he ſays, "among

"among the reſt of our chirurgical converſation at this meeting, mention was made of an accident in which one of the arteries, between the tibia and fibula was opened about the middle of the leg, and the bleeding ſtopped from time to time by various methods, but at laſt it was thought adviſeable to amputate the limb. Upon reflection, it occurred to me that in this caſe, the removal of about two or three inches of the fibula was practicable, and probably it might have given a fair opportunity of ſaving the limb." From this hint I was determined, as there was no time to loſe, to try the experiment. I laid the fibula bare, and after paſſing a ſpatula underneath the bone, ſawed off about two inches. On wiping away the blood, and looſening the tourniquet, the bleeding veſſel was ſoon diſcovered, and eaſily taken up. The portion of the fibula that was removed had received a conſiderable injury from the edge of the ſcythe. There was not any return of hæmorrhage after the operation. The young man's ſtrength was ſoon recruited by the bark, elixir of vitriol, and a milk diet. The loſs of bone was ſupplied by an inter-

vening callus, and the cure perfectly completed in two months. He is now able to carry heavy burdens, to follow his husbandry business, and the limb is in every respect, as strong and as useful as the other. I need not add, how much it is the duty of every surgeon, to use his utmost endeavours, on all occasions, to save a limb. In the successful event of this case, I claim no other merit, than by putting into execution the hint given by that excellent and ingenious surgeon, the late Mr. Gooch of Halesworth in Norfolk.

Bath, June 9th, 1801.

ARTICLE XVII.

Obſervations on the Medical Uſe of the white Oxyd of Biſmuth.

By ALEX. MARCET, M.D. &c. Sec. M.S.

One of the Phyſicians to Guy's Hoſpital.

Read, April 12, 1801.

The powerful effects of moſt of the metallic oxyds on the animal œconomy, and the ſucceſs with which ſome new remedies of this claſs have, of late years, been introduced into medical practice, will, I hope, be deemed a ſufficient apology for offering to this Society a few obſervations upon one of theſe ſubſtances, the medical properties of which are yet but little known, and have never, I believe, been ſubmitted, in this country, to any regular inveſtigation.

The ſubſtance to which I allude is the white oxyd of Biſmuth, commonly known by the name of Magiſtery of Biſmuth, and ſold chiefly by perfumers as a paint for whitening the

the complexion. Being at Geneva about twelve months ago, I heard that this ſubſtance had for many years paſt been brought into medical uſe by Dr. Odier profeſſor of phyſick in that town, and employed there with conſiderable ſucceſs, not only by him, but alſo by ſeveral of his colleagues in the treatment of a few ſpaſmodic diſorders, and more eſpecially in the cure of a particular ſymptom of dyſpepſia. I had then an opportunity of hearing from Dr. Odier himſelf the account of his obſervations on this medicine, and at my requeſt, he was ſo obliging as to draw up the following conciſe but very concluſive note, which, for the ſake of brevity, I ſhall tranſcribe in his own words.

"The magiſtery of biſmuth is prepared by diſſolving a quantity of very pure biſmuth in nitric acid, and precipitating it by water, or by a ſolution of potaſh. But if the biſmuth is not very pure, if for inſtance it is mixed with nickel, the precipitate is not perfectly white; it is then mixed with a greeniſh precipitate, which is nothing but an oxyd of nickel which water will not precipitate; for which reaſon we are more certain of obtaining

ing a pure precipitate of bismuth by water than by potash.

"I use this remedy with success in doses of six grains, four times a day, in all cases of spasms of the stomach, brought on by any kind of aliment, and proceeding only from the irritability of that organ. This complaint is extremely frequent at Geneva, particularly amongst servant maids who are in the habit of carrying water on their heads, and make great use of their arms.

"I have published my observations on this subject in two papers, one of which has been printed in the "Journal de Medicine," and in the "Journal Encyclopedique" of Paris for the year 1796; and the other, sent by Dr. Belcombe to the Royal Society of Gottingen, has been printed in a German journal from whence Dr. Murray has drawn, in his "Apparatus Medicaminum" a very detailed extract."

Dr. Odier, in addition to this account, assured me repeatedly that he had tried the oxyd of bismuth in much larger doses, and that he had never observed it to produce any bad effects whatever; whilst on the contrary, he had hardly ever known it to fail in effect-

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ing a cure, when uſed in the circumſtances that have juſt been mentioned.

The magiſtery of biſmuth, it is proper to obſerve, had been at different times tried by a few foreign practitioners before Dr. Odier aſcertained what may be conſidered as its ſpecific effects; but they uſed it ſo ſparingly, and under ſuch prejudices ariſing from the notions they had formed reſpecting its deleterious effects, that, until Dr. Odier's more deciſive experiments, nothing but doubts and diſtruſt had ariſen from thoſe imperfect trials. As I mean to offer to the Society a few caſes that have lately come under my own obſervation, I ſhall not prolong this paper by a repetition of the obſervations publiſhed in different foreign journals, by the ingenious profeſſor of Geneva, who has himſelf pointed out, in the note that has juſt been read, the chief references upon this ſubject. But as I believe the conciſe and diſtinct account of this medicine given in Murray's "Apparatus Medicaminum *," referred to by Dr. Odier, will be found more acceptable than any hiſtory or comment which I ſhould be able to offer, I ſhall not

* Vol. vi. p. 252.

ſcruple

ſcruple to tranſcribe here the quotation at full length.

" Ab uſu interno magiſterii biſmuthi præcordiorum ingentes ſurrexiſſe anxietates memoravit jam Pott Berolinis anno 1739; infauſto hoc effectu non deterriti, auſi tamen ſunt medici, intus idem præſcribere; contra morbos a nimiâ nervorum ſenſibilitate proficiſcentes, potens in eo multoties deprehendit auxilium *Odier* *, in ventriculi potiſſimum & partium cum eo maxime connexarum morbis, iis præcipue qui a nimiâ fibrarum ejus carnoſarum irritabilitate pendent †, etiam ſymptomatibus hyſtericis, colicâ, alvi fluxu, cordis palpitatione, doloribus capitis, ſtipatis, & maxime in gaſtrodyniâ; in hoc etiam morbo perinde ac in debilitate ventriculi in ſpaſmos proni, & in ipſo malo hyſterico efficax expertus eſt *Carminati* ‡; in doloribus ventriculi chronicis §; dolorum, quos ſchirrus pylorum obſidens excitaverat atrociſſimorum inſigne crebro ab ejus uſu lenimen comperit

* Journal de Médicin, Tome 68, Juillet 1786.

† Odier Gotting. anz. von. gel. Sachen. l. m. c.

‡ Opuſcul. Therap. Pav. vol. 1. 1788.

§ Bonat. Journal de Medicin, vol. 74. 1788.

Odier;

Odier; in epilepſiâ tamen, aut convulſionibus ſolum nihil effecit, neque ſemper in ventriculi morbis cum viſcerum tabe notabili aut aliis malis complicatis cum fructu adhibitum: ejus uſu alvus alias obſtipatur, alias juſto magis relaxatur."

I ſhall now proceed to give a ſummary account of the few caſes in which I have tried this medicine, and I ſhall make a point of mentioning, candidly and without any reſerve, thoſe inſtances, in which the remedy that I am recommending to notice, has proved ineffectual; a method which I confeſs I ſhould wiſh to ſee more generally adopted.

CASE I.

On the 13th of July laſt, Hannah Stillwell of Ilford in Eſſex, a married woman, thirty-eight years of age, whoſe employment conſiſts chiefly in needle work, ſpinning and other ſedentary occupations, applied to the City Diſpenſary for relief. She complained of a gnawing pain and great ſinking at the pit of her ſtomach, which came on almoſt inſtantaneouſly after taking any food or drink, and was ſoon followed by ſickneſs and vomiting.

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She could only retard this for a few minutes by lying in a horizontal poſture. In ſhort, it appeared from her account, that only an extremely ſmall portion of the nouriſhment which ſhe took could be tranſmitted to the alimentary canal. Soon after vomiting, however, ſhe again felt an inclination to eat. Her complaint had begun two months ago, and had continued ever ſince. She ſaid ſhe was a good deal reduced by it, and ſeemed extremely deſponding; yet ſhe was by no means remarkably emaciated. She complained of being generally very coſtive. Her catamenia and other functions were regular. A doſe of caſtor oil was ordered to be taken directly, and a bitter infuſion, in the doſe of one ounce, three times a-day.

On the 21ſt the ſymptoms being exactly the ſame, the caſtor oil was repeated, and a mixture of magneſia, rhubarb and peppermint-water, was ſubſtituted for the bitter infuſion. I did not haſten to try any of the metallic medicines, becauſe I conceived her complaint to depend, either upon ſome organic diſeaſe within her ſtomach, or upon ſome ſpaſmodic affection of that organ; and I did not imagine, that,

that, on the former ſuppoſition, any of the metallic medicines could be of material ſervice; whilſt, on the latter, I wiſhed firſt to give a fair trial to the biſmuth, a ſupply of which I expected to be able to procure in a few days.

On the 30th, the ſymptoms continued as before, but ſhe ſaid the mixture gave her a momentary eaſe, and could ſit on her ſtomach longer than any thing elſe. The ſame medicine was ordered to be repeated, and ſome of the *pilulæ aloes cum myrrha* were directed to be taken occaſionally.

On the 2d of Auguſt, there was little or no change in the ſymptoms. Some drops, conſiſting of æther, tincture of bark and vitriolic acid, were added to the former medicines.

On the 17th, ſhe complained of not deriving any ſenſible benefit from her medicines; ſhe then looked thinner than when I had ſeen her firſt, but not ſo much as might have been expected from the nature of her complaint: yet her general character and appearance, and ſtill more ſo, her perſeverance, and the regularity with which ſhe came for advice, at ſtated periods, from a great diſtance,

diſtance, did not permit me to ſuſpect any deceit or miſrepreſentation in the account which ſhe gave of her complaint. On that day, I ordered five grains of the oxyd of biſmuth, with fifteen grains of the pulv. tragacanth. compoſ. to be taken three times a-day.

On the 24th ſhe came to me with an uncommonly animated countenance, ſaying ſhe was almoſt quite well; but ſhe begged I would let her have ſome more of thoſe powders that had produced ſuch remarkably good effects; to which requeſt I moſt readily conſented.

On the 31ſt ſhe ſaid ſhe was quite free from complaint, but ſtill requeſted I would allow her to take the powders a few days longer, as ſhe was afraid of a relapſe if ſhe ſhould leave them off all at once. She accordingly continued to take two of theſe powders a-day, for about a week longer; when finding herſelf perfectly free from complaint, ſhe diſcontinued all kinds of medicines.

Since that time I did not hear any more of this woman, until about the middle of November laſt, when ſhe called upon me, not to complain of a relapſe, as I firſt apprehended, but to thank me again for the bleſſing

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of health to which ſhe had been ſo happily reſtored. She ſaid, however, that although ſhe was in general quite free from her complaint, yet if any thing *fretted her*, and particularly if her children gave her any uneaſineſs, ſhe felt, occaſionally, ſome ſlight ſenſation of it.

CASE II.

Mary Wootfild, a girl ſeventeen years of age, preſented herſelf to the diſpenſary for relief, on the 30th of July. She laboured under a chloroſis, the moſt diſtreſſing ſymptom of which was a violent pain in the region of her ſtomach. Some *pillulæ aloes cum myrrha* were ordered with a bitter infuſion.

On the 3d of Auguſt, there being no favourable change whatever, ſome pills of vitriolated iron, with extract of gentian, were added to the former medicines.

On the 7th, the ſymptoms of gaſtrodynia being rather increaſed, 20 grains of the mixed powder of biſmuth and tragacanth, (which I ſhall now call *compound powder of biſmuth*,) were, as in the former caſe, ordered to be taken three times a-day; and ſhe was directed to leave off all other medicines.

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On the 10th, ſhe was a good deal better, though not quite free from uneaſineſs in her ſtomach. The ſame powders were increaſed to the doſe of half a drachm, three times a day.

On the 13th, ſhe had ſtill ſome remains of pain in her ſtomach, and complained of ſome other dyſpeptic ſymptoms. The biſmuth was continued, and a bitter infuſion, with a few drops of aqua ammoniæ, were directed to be taken, twice a-day.

On the 17th, ſhe was a great deal better, and the doſe of the powders was reduced to 20 grains, three times a-day.

On the 20th, ſhe was very nearly free from complaint, and the powders, and bitter infuſion, were ordered to be continued.

On the 31ſt, ſhe was quite free from complaint, and diſcontinued taking any medicines.

CASE III.

Catherine Goffee, a woman twenty-two years of age, was admitted as a patient to the diſpenſary for a very ſevere pain in the pit of her ſtomach. This pain was conſtant, although not uniform, in violence. She had no fever nor cough, but her face was ſomewhat fluſh-

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ed. Her catamenia and other functions were regular; her tongue was clean, and her general health appeared very little affected. The compound powder of bismuth was ordered in doses of 20 grains, three times a-day.

On the 29th, she seemed nearly in the same state, and thought the powder rather increased the pain. She was, however, prevailed upon to take six more of them; but at the same time she was directed to take some drops of æther, and spiritus ammoniæ fœtidus, when the pain should prove particularly troublesome.

On the 2d of November, her complaint was not in the least abated; on the contrary her pulse was a little feverish, her skin dry, and face flushed. I then abandoned entirely my former plan; instead of which I ordered a blister to be applied to her chest, with a sudorific medicine. About a week after this she returned thanks, being perfectly cured of her complaint.

CASE IV.

On the 14th of August, M. H. a single woman twenty years of age, became my patient in the dispensary. She laboured under

an extremely obſcure and complicated diſorder, for which, I am ſorry to ſay, ſhe is ſtill under my care with very little hope of recovery *. I ſhall not at preſent trouble the Society with the particulars of this caſe, but ſhall only mention that the leading ſymptoms were then, and are now ſtill, a conſtant and moſt agonizing pain in the pit of her ſtomach and between her ſhoulders, without any fever, cough, or other ſymptoms of phthiſis pulmonalis. After trying a great variety of medicines without effect, I ventured, on the 4th of September, to give her the biſmuth in the uſual doſe of five grains of the oxyd, three times a-day. She took it for three days, without any relief whatever; after which I did not think proper to puſh this trial any farther. Since that time, ſome ſlight and very tranſient ſymptoms of dropſy have occaſionally appeared, and ſome vague ſuſpicion has been entertained of a diſeaſe in the liver. I have repeatedly requeſted upon this caſe the advice of my much reſpected colleague Dr. Walker,

* This patient recovered at laſt, under a gentle, but long continued courſe of mercurial medicines.

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and I may ſay, there hardly remains now any important medicine that we have not tried, all of them without any ſucceſs whatever. I mention theſe circumſtances merely to ſhew that the failure of biſmuth in this inſtance can hardly be brought as an evidence againſt its efficacy in ſpaſmodic affections of the ſtomach.

CASE V.

On the 8th of October laſt, Daniel Lee, a maſon, fifty years of age, applied to me for relief. He complained of being ſeized every day, about two o'clock after dinner, with a moſt painful ſenſation in his præcordia, attended with ſickneſs, great giddineſs, but not vomiting. This laſted about four or five hours, after which it gradually ſubſided. During the fit, he could hardly ſtand, and was obliged to leave off his work. He was very thin and pale, and looked a great deal older than he ſaid he was. He had been ſubject, more or leſs, to this complaint for ſome years paſt, but for the ſix preceding weeks, it had been more conſtant and more ſevere than ever before. He ſeemed to enjoy tolerably good health in other reſpects. He had applied repeatedly for medical advice, and after taking

a variety

a variety of medicines had been told, that nothing but time and nature could cure his complaint. I directed him to take 20 grains of the compound powder of biſmuth, three times a-day.

On the 11th, he had taken ſix powders, and the violence of the fits was already abated.

On the 14th, he had taken twelve powders, and the fits were much leſs ſevere, and returned only every other day.

In a few days after this, after having taken in all, about two dozen of the powders, he returned thanks being perfectly cured; and I have juſt heard that he has continued, to this day, entirely free from complaint.

CASE VI.

A ſervant maid in my family, twenty-three years of age, who had, for ſome time paſt, laboured under amenorrhæa, was ſubject, amongſt other unpleaſant ſymptoms, to a violent pain in her ſtomach, which ſeized her every morning about eleven o'clock, and ſometimes continued in the afternoon; but in general, it was conſiderably relieved by taking ſome food. She had taken large quantities of

of ferrum vitriolatum, and other tonics, without any relief of this ſymptom; when, on the 8th of November, I directed 20 grains of the compound powder of biſmuth to be taken, three times a-day. On the ſecond day after this, ſhe had but a very ſlight return of the pain, and on the third, ſhe was totally free from it. A week after this the catamenia returned, and ſhe has been free from complaint ever ſince.

If it be permitted to draw any inference from ſo ſmall a number of trials, it would appear that the oxyd of biſmuth is a remarkably ſucceſsful medicine in ſpaſmodic affections of the ſtomach; for in four caſes out of ſix, in which it was tried, a complete cure was almoſt immediately obtained; and in the two inſtances in which it has failed, the affection, which was at firſt ſuſpected to depend upon a ſpaſm of the ſtomach, has ſince appeared to be of a complicated, and probably, of a very different nature. I hope that I ſhall be able to lay before the Society the reſults of further trials; but in the mean time I have thought it proper not to delay this communication, as it may be the means of increaſing the

the number of obſervations *: and although this medicine has not hitherto appeared to be of much ſervice in other complaints, it ought not to be rejected without a fair trial, on account of its limited effects; eſpecially as daily experience ſhews that thoſe medicines, which have been ſo much extolled at firſt for their univerſal virtues, generally prove in the end leſs uſeful than thoſe which have firſt attracted notice by their efficacy in relieving only ſome particular ſymptom.

Some cautions (as Dr. Odier has pointed out in his note) are required for the accurate waſhing and purifying of the white oxyd of biſmuth; and, ſimple as it is, this preparation is tedious, and requires conſiderable attention. Meſſrs. Allen and Howard, of Lombard ſtreet, have been ſo obliging as to prepare, at my requeſt, a very pure ſpecimen of this medicine.

* Since the above paper was read before the Society, I have had frequent opportunities, at Guy's Hoſpital, of trying the oxyd of biſmuth in ſpaſmodic affections of the ſtomach, and thoſe trials have fully confirmed the opinion which I offered three years ago, on the utility of this medicine. It has alſo been tried by ſome of my medical friends, and amongſt others by Mr. Charles Aikin, who have formed a favourable opinion of its effects.

dicine. In this ſtate, the oxyd of biſmuth appears in the form of an almoſt impalpable powder, of a beautiful white colour. I generally mix it with ſome of the pulvis tragacanth. comp., chiefly with a view to ſuſpend it in a watery vehicle; but magneſia and ſugar, or any mucilage, would, I ſuppoſe, anſwer the ſame purpoſe; and the oxyd alone might probably with equal propriety be given in the form of pills. The impure oxyd of biſmuth being ſold in the ſhops under the name of *Magiſtery of Biſmuth*, I ſhould propoſe to call that preparation, which is to be uſed as a medicine, *Oxydum Biſmuthi album;* or if it be thought too great an annovation to uſe a nomenclature which, although univerſally adopted in chemiſtry, has not yet been generally adapted to pharmaceutical language, I ſhould call it, according to the analogy of the London Pharmacopœia, *Calx Biſmuthi alba.*—The name, in this particular inſtance, may be of ſome importance, as the impure oxyd ſold in the ſhops for coſmetic purpoſes, may often be mixed with nickel, cobalt, and perhaps alſo, with lead or other impurities. It has even been ſuſpected that common Magiſtery of

of Bismuth rubbed on the skin could injure the constitution; but it is a mere conjecture, and I believe the chief and real objection against its external use, is that certain odorous fumes or gases, and particularly the sulphurated hydrogen gas, turn it black or brown on the skin itself.

In recommending this medicine to the attention of the Society, I should be sorry if I was supposed to rely implicitly, either upon the trials made at Geneva, or upon those which I have made myself. I am perfectly aware that nothing but time, and a very general experience, ought to establish the utility of any new medicine: but at the same time the fear of innovation ought not to be carried too far, and I hope in this particular instance, the safety of former trials, and the previous approbation of a few respectable practitioners, will appear sufficient grounds to intitle this medicine to a candid examination.

ARTICLE XVIII.

On the Uſe of the Bath Waters in Iſchias, or the diſeaſes of the Hip-Joint, commonly called a Hip-Caſe.

By W. FALCONER, M.D. F.R.S. &c.

Ηδε νȣσος χαλεπη λιην εςι και χρονιη.

Hipp. de Internis Affectionibus.

THE complaint of the hip-joint, commonly called a hip-caſe, has (in modern times eſpecially) been much overlooked in the enumeration of diſeaſes.

It has, under the appellation of ſciatica, been confounded with rheumatiſm and gout, and alſo with pſoadic abceſs; from all which it differs materially, both in its nature, ſeat, and method of cure.

I ſhall endeavour, firſt, to give ſome account of the appearance of this complaint, and of its attendant ſymptoms, and proceed to ſpeak of its cauſes, and the method of cure,

and conclude with ſome remarks on what other writers have delivered on the ſame ſubject.

Few practitioners have ſeen this diſeaſe at its commencement. Its ſymptoms are uſually inconſiderable and tranſient, ſometimes diſregarded, and at others conſidered only as the conſequence of ſome caſual ſtrain or over-exertion, or of too long continued exerciſe; and, if the perſon affected be in middle life, or farther advanced, it is miſtaken for a gouty attack. It is certainly true, that all theſe cauſes may produce ſymptoms nearly reſembling thoſe hereafter deſcribed, however different the nature of the ſeveral complaints may be.

In the ſtate wherein perſons labouring under this diſeaſe, come to Bath for relief, the ſeat of the pain is generally deſcribed to be, rather behind the great trochanter of the thigh bone, and nearly on the ſame level. The perſons affected ſpeak of it, as being, to their ſenſations, deep-ſeated, but ſtill capable of being aggravated by moderate preſſure with the finger on the part where the pain is felt. No external ſoreneſs of the ſkin is obſerved.

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The glutæus magnus, and the vaſtus externus muſcles generally appear waſted and flabby, and the external line of diviſion between the glutæus and the biceps, and ſemitendinoſus ſeems in a good meaſure obliterated, and filled up with a flabby protuberance, as if the glutæus magnus was let down, or ſpread over the upper part of the muſcles which lie immediately below it. Notwithſtanding this apparent enlargement, the circumference of the thigh is, in reality, diminiſhed; which diminution in large ſubjects, I have ſeen amount to three or four inches, when compared with the ſide not affected

Sometimes the breadth of the nates on the diſeaſed ſide, is much increaſed, though its prominence and firmneſs are diminiſhed; a man now* in the Bath hoſpital, has the nates on the left ſide, at leaſt three inches wider than on the right. The head and neck of the thigh-bone itſelf may be diſcerned, by feeling, to be much more prominent on the affected ſide; and the joint ſuffers, I believe, a partial diſlocation.

* Auguſt 27, 1801.

The tubercle, or lower part of the iſchium, may, in many inſtances, (but not always,) be diſcovered, by feeling it behind, to be lower on the affected ſide than on the other. A man now in the hoſpital is a remarkable inſtance of this difference between the height of the bones on each ſide; and a pelvis of a perſon who died at the ſame place, and was preſerved there many years, ſhewed it ſtill more ſtrongly. The leg on the ſide affected is ſometimes ſhorter, though it is more frequently longer than on the other. Sometimes the difference is but little; but, I believe always perceivable. A man, now in the hoſpital, has the left leg, which is the ſide affected, at leaſt two inches and a half longer than the right. It often happens that the leg, which had been at firſt elongated, becomes, in the courſe of the diſeaſe, ſhorter than the other; but I have ſeen unqueſtionable inſtances, in private practice, as well as in the hoſpital, wherein the affected limb was ſhortened, without any previous elongation. Motion of the limb is, I believe, always painful, although not in any violent degree, unleſs in the advanced ſtages of the diſeaſe; but

 I have

I have obſerved, in ſeveral inſtances, that the patients could deſcribe a circle with their toe, with as much eaſe as they could advance the foot forwards.

In general, they find it difficult to extend the legs, ſideways, far from each other, though ſometimes the contrary is the caſe. It is, I believe, univerſally true, that they are unable to ſupport any conſiderable proportion of the weight of the body on the affected ſide; or to ſtand alternately on the legs, as is uſually done by perſons in health.

The pain is not confined to the ſpot neareſt to, or lying over the real ſeat of the diſeaſe; but ſeems to be propagated downwards, in the courſe of the vaſtus externus, to the knee, and along the peroneus anticus to the outer ancle. Sometimes the pain of the knee has been ſo violent as to cauſe that joint to be miſtaken for the ſeat of the malady, when the hip-joint only was affected *.

It

* There is a conſiderable analogy between the effects of a carious or inflamed tooth, and thoſe of a ſimilar event taking place in the hip joint. The pain is, in both inſtances, diffuſed to a conſiderable diſtance from the ſeat of the diſeaſe; the tooth is raiſed from the ſocket,

analo

It is not uncommon for the ſeat of the pain to be on the upper part of the pectineus muſcle *, near to the ſpot where pſoadic abſceſſes often appear; and, in ſuch caſes, the pain deſcends on the inſide of the thigh, nearly in the direction of the adductores of the triceps, the vaſtus internus, and in a ſtraight direction from the knee downwards to the internal ancle.—In the general ſtate of the diſeaſe as above deſcribed, I have moſtly found the pulſe regular, and of the natural ſtandard, in point of quickneſs, the ſkin cool, and the evacuations as uſual in

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analogous to the lengthening of the limb in hip-caſes; and when the pain and inflammation ſubſide, the tooth ſinks lower into the ſocket than it was originally. This is analogous to the ſhortening of the limb after a previous elongation. The thickening of the membrane lining the ſocket of the tooth, which is cauſed by the inflammation, raiſes the tooth upwards; and the waſting or decay of the ſame membrane afterwards, allows the tooth to ſink deeper into the ſocket, than it did when in its natural ſituation.

* In a caſe now in the hoſpital, the pain began on the outer part of the hip, near the great trochanter, and almoſt entirely removed from thence into the groin, where it remains at preſent.

 health;

health; and indeed very little change in the general ſyſtem. But when the diſeaſe advances, and the part affected becomes ſore and tender to a *ſlight* touch, and the pain grows acute, throbbing, and uninterrupted; when the ſwelling increaſes, and the ſkin of the pained part changes to a red or pink colour, with an appearance of ſlight eryſipetalous inflammation, the pulſe *then* is accelerated conſiderably, the face changes alternately from a lead-coloured paleneſs to fluſhing, and the contrary*; the ſkin is moſtly covered with a clammy ſweat, the tongue grows white, the fleſh waſtes, the ſtrength declines, and the ſituation of the ſick perſon becomes, in a good meaſure, ſimilar to that of one in the advanced ſtate of a pulmonary conſumption. As the Bath waters are confeſſedly prejudicial in every ſituation accompanied with hectic fever, we *ſeldom* witneſs the laſt ſtage of this diſeaſe, ſuch perſons being uſually ſent

* I have been informed by Mr. Phillot, ſurgeon to the hoſpital, a gentleman whoſe judgment, as well as long experience intitle his obſervations to the higheſt regard, that he has remarked ſtartings and catchings during ſleep to be, in this ſtage of the diſeaſe, ſome of the moſt certain ſigns of the formation of matter.

home

home as incapable of receiving benefit from this remedy. Sometimes indeed we have been neceſſitated to retain ſuch diſtreſſed objects, until the termination of their miſeries; as when they have, through the indiſcretion, ignorance, or unfeelingneſs of thoſe to whoſe care they were intruſted, been ſent hither in the laſt ſtage of the diſeaſe, and were too weak to be ſent back. An abſceſs, in ſuch perſons, has been uſually formed on the outſide of the thigh, near the ſeat of the pain; and has either burſt of itſelf, or been opened, and the patient either ſunk preſently under the exceſs of the diſcharge, or continued to linger ſome time in the ſame ſtate with thoſe who die tabid, as it is called, from long continued, and exceſſive ſuppuratory evacuations. Every caſe however, where ſuppuration takes place, does not prove fatal. Some eſcape, and I have been informed, that they have principally been thoſe, wherein the abſceſs has been ſuffered to burſt of itſelf, in preference to its being opened with the knife.

If the quantity of matter be not very large, and the hectic fever abates on the diſcharge of it, there are hopes that attention and profeſſional aſſiſtance may prove ſucceſsful.

But the advice of an eminent ſurgeon *, when ſpeaking of the empyema pſoadicum is here in a good meaſure applicable, " that the " inſtances of thoſe who perfectly recover are " ſo few, when compared with thoſe to whom " it proves fatal, that it will never be prudent " to make a favourable prognoſtic."

In ſuch caſes, where the patient eſcapes with life, an anchyloſis, or great rigidity of the joint, often, takes place, or at leaſt a conſiderable ſhortening of the limb; which laſt indeed, is often the conſequence of the diſeaſe, under circumſtances much more favourable.

Hectical ſymptoms, though they cannot but ſuggeſt a doubtful prognoſtic of ſucceſs, are not always indications of impending ſuppuration. If proper management be uſed, and *timely* applications made, this diſpoſition may *often* be checked. Even when there are the ſtrongeſt reaſons to believe that a fluid has been effuſed into the ſheaths of the muſcles, it has been found poſſible to cauſe it to be reabſorbed, without coming to ſuppuration, or without its being again depoſited on ſome other part, or producing any other bad con-

* Mr. Pearſon of the Lock Hoſpital.

ſequences.

ſequences. But matter, when completely formed, is, I believe, never taken up again, without producing ſome miſchievous effects.

Some writers ſpeak of the ſhortening of the limb as a mark of ſuppuration being formed. A ſudden change from elongation to abbreviation may perhaps indicate, or rather afford a preſumption of this kind. But this event will be manifeſted by many other ſymptoms at leaſt equally deciſive. The mere abbreviation of the limb often takes place early in the diſeaſe, and long before the commencement of the feveriſh ſymptoms; and may be ſatisfactorily accounted for without ſuppoſing it to ariſe from the formation of matter.— This diſeaſe is ſometimes acute and rapid in its progreſs, and at others ſlow and chronical. I have ſeveral times ſeen it come to an alarming height in a few weeks *, and in other inſtances to continue ſeveral years without much perceptible abatement or aggravation.

In one perſon, two years elapſed after the beginning of the pain and lameneſs, before

* A man now in the hoſpital is an inſtance of this.

any perceptible alteration in the length of the limb took place. After that interval, the leg began to lengthen, and advanced ſo as to be nearly three inches longer than the other; in which ſtate it ſtill continues, (Sept. 24, 1801,) at the interval of full two years from the time it was firſt obſerved to become longer. During the above long period of the complaint he has ſuffered no ſymptoms of fever, nor manifeſted any ſigns of ſuppuration.

In caſes that terminate in death, anatomical examination obviouſly points out the nature of the diſeaſe. The head of the thigh-bone, and even the neck, is generally found carious; and the acetabulum, and ſometimes part of the bones of the pelvis ſurrounding it, corroded, and ſometimes in ſuch a manner, as to open a paſſage internally into the cavity of the pelvis. Matter is often found in the cotyloid cavity itſelf, and in ſuch a quantity as could ſcarcely be ſuppoſed to be lodged there; and it is ſaid, without any marks of inflammation in the parts about it. To theſe appearances however, I never have been an eye-witneſs.

The

The ſymptoms that occur at the firſt coming on of the diſeaſe, are ſo inconſiderable, and their advance ſo gradual, that it is difficult to recount them accurately. A ſenſe of wearineſs and weight on the affected ſide are uſually mentioned as the firſt marks of indiſpoſition. This is followed by pain *, ſlight at firſt, but which increaſes gradually. A difficulty of ſtooping forward ſucceeds, ſo that the patients feel much uneaſineſs when drawing on their ſtockings, and are often obliged to put them on by bending the leg backwards, and placing the hand behind the body.

Stiffneſs of the joint, and an aggravation of the pain on motion, ſoon follow, and, in ſome perſons, a difficulty of ſeparating the legs

* A man now in the hoſpital, who came in Auguſt 27, 1801, informed me that his firſt ſymptom was a violent pain in the right hip behind the great trochanter, which attacked him after lying on the ground when he had been working in the hay harveſt, on July 14th next preceding. This pain continued ſome time in that ſituation, and removed in a great meaſure from thence into his groin, where it is at preſent. Some little uneaſineſs ſtill remains in the hip where it firſt began, but very inconſiderable, compared with what it was at its commencement.

legs ſideways; and in ſome, though more rarely, an equal difficulty in bringing the legs together. In the former caſe, it has been found neceſſary, at the hoſpital, to provide cuſhions, to prevent the knees galling one another; and in the latter, a band or belt incloſing both the knees, to guard againſt a ſtrain, by too great a lateral ſeparation of the legs from one another.

It is perhaps, not difficult to account for ſeveral of the above, ſeemingly contradictory, ſymptoms, without ſuppoſing any real difference in the nature of the diſeaſe.

The thigh-bone ſtands in nearly the ſame direction with the trunk of the body, only a little obliquely, in ſuch a manner that the upper parts of the bones are at a greater diſtance from each other than the lower. The neck of the thigh-bone is a protuberance, ſituated rather interiorly at the upper end of the bone, inclining upward, and a little forward, and making an angle with a right line drawn through the center of the thigh-bone, of about 48 or 50 degrees, but in ſome ſubjects, the direction of the neck is almoſt tranſverſe, or at right angles with the trunk of the body.

The

The head of the bone contains about two-thirds of a ſphere, not indeed accurately ſo, but ſufficiently inclining to that figure to explain ſeveral circumſtances that take place in this diſeaſe. The largeſt part of the convexity of the head of the bone, lies in the back part of the acetabulum.

I have already obſerved that a partial diſlocation of the limb takes place, when it either ſhortens or lengthens; and I think it clear that this alteration of the length depends on the part of the head of the thigh-bone, or of the acetabulum which ſhall be affected. We cannot doubt that the firſt appearance of this diſeaſe is in form of inflammation of the part, which is the ſeat of the complaint. The pain, difficulty of motion, and in bad caſes, the ſubſequent ſuppuration, indicate this deciſively. The effect of inflammation on the cartilage, or membrane covering the head of the joint, and on that lining the ſocket, is to thicken it in the parts ſo affected. If then, the inflammation affects either the lower part of the head of the bone, or of the acetabulum, it will raiſe the head of the bone, and at the ſame time partially diſlocate it, and thereby ſhorten the limb, and cauſe a pro-

jection

jection of the head of the bone. If the cartilage, or periosteum, be thickened in the superior parts, it will thrust the head of the bone downwards, and lengthen the limb. If the disease be seated at the bottom, or the back part of the cotyloid cavity, or in the sinovial glands, it will thrust the bone outwards, without much affecting its length. A man, now in the hospital, has the nates on the left side extended laterally nearly one-third farther than on the right, by the projection of the head of the thigh-bone. If the construction of the neck of the os femoris be to go off nearly at right angles to the trunk of the body, the apparent projection will be greater in proportion.

I observed however, in the instance above mentioned, that the glutæus muscle was not let down, but preserved the usual marks of separation from the muscles of the thigh.

It was noticed above, that the os ischium, on the affected side, was sometimes, but not always, lower than on the other.—I have seen this take place, both when the leg on the affected side was longer than the other, and also when it was shorter. It proceeds, I think, from the pendulous state of the affected limb,

which, whether it be lengthened or ſhortened, cannot bear its part in the ſupport of the body, but hangs a dead weight on the affected ſide; and probably drags the parts, with which it is connected, downwards along with it.

When the ſeat of the pain is ſituated in the groin, it is not eaſy, at firſt ſight, to diſtinguiſh a hip-caſe from the beginning of a pſoadic abſceſs; and indeed ſome caſes of the latter kind have been ſent to the Bath hoſpital, ſuppoſing them to be hip-caſes. They may however I think be diſtinguiſhed, by obſerving that the pain in the groin in pſoadic abſceſs, though it extends to the upper part of the thigh, and ſometimes a conſiderable way down it, does not ſhoot downwards to the knee, and from thence to the ancle as in hip-caſes.

In pſoadic abſceſs, there is no actual abbreviation or elongation of the limb, though there is ſometimes a contraction of the knee joints.—The thigh-bone does not project in pſoadic abſceſs, nor are the nates larger on the affected ſide, nor is the glutæus let down over the muſcles below it.

CAUSE.

CAUSE.

As this diſeaſe is often owing to careleſsneſs, imprudence, or accident, ſome account of the cauſes that are moſt liable to produce it, may not be without its uſe.

The permanent application of cold to the part is the moſt common aſſignable cauſe.

On this account, and indeed for other reaſons, hip-caſes are more frequent among the lower ranks, and among labouring people; though the higher ranks are by no means exempt.

I have known it originate from damp beds, from working in water, or indeed in wet grounds, or being much expoſed to wet caſually, as among waſher-women and brewers' ſervants, and others liable to have their clothes often wet.

But lying on the damp ground, eſpecially when the body is heated, is the moſt common, and, as I think, the moſt powerful cauſe.

Labourers in harveſt are particularly liable to hazards of this kind from their lying down, and frequently ſleeping, under trees, and on the damp ground, when the body is heated with labour, and exhauſted with fatigue. A

very confiderable portion of the perfons in the table fubjoined, owed their complaints to this dangerous indulgence, from which no caution, no intreaty, can divert them, though they are generally as fenfible of the danger, as thofe who fuggeft the warning not to incur it. But a prefumptuous fpirit to fhew what they efteem a mark of courage, prompts them to incur hazard without any obligation of duty, when if any real demand for fuch a fervice had been made, they would have complained of being required to run fo great a rifk.

I was fome time in doubt if the exhalation from the moift earth might not tend to produce this difeafe by means of its fpecific qualities, independent of the fucceffive generation of cold which is produced by conftant evaporation. But I am inclined to think that it did not proceed from any fpecific quality of the moifture exhaled, but from the cold only; as I have feen the difeafe produced by fitting at an open window, where no exhalation of any kind could be fuppofed to have any effect.

Blows and falls are alfo accounted among the caufes of this difeafe; and it is certain that fuch accidents may, and often do produce it.

Over-exercife and ftrains have the fame effect. But none of thefe caufes make any alteration, as far as I know, in the nature of the complaint.

METHOD OF CURE.

As thofe who refort to the Bath for relief in hip-cafes, do it with a view to the trial of a local remedy, our principal intention muft be, to put them into fuch a fituation as will enable them to receive fuch benefit, as the remedy is capable of affording.

It fhould be obferved that the external application of the waters, is alone employed, their qualities, internally taken, being too heating to be compatible with the purpofe aimed at.

As fever and inflammation are moft adverfe to the general intentions of cure, and to the ufe of this particular remedy, every precaution is taken to prevent, or to check them.

It fortunately happens that, in *moft* inftances, the pulfe is little, or not at all accelerated, though the pain and other fymptoms are very diftrefsful. Under fuch circumftances, after the exhibition of a gentle purgative, it is ufual to enter on a courfe of bath-

ing.

ing. If the patients be tolerably ſtrong, and the ſymptoms moderate, they are directed to bathe in the hot-bath, which is the one ſpecially appropriated for the uſe of the hoſpital patients, and is about 105 degrees of heat. The uſual time for continuing in the bath is from 15 to 25 minutes, and it is generally repeated twice or thrice a week. After a few times bathing, the dry-pump as it is quaintly called, or pumping the affected part without bathing, is adviſed, and this is tried on the part affected, on thoſe days when the patient does not bathe, Sundays excepted. From 50 to 200 ſtrokes of the pump are uſually given, the latter of which numbers takes up about five minutes of time.

The firſt good effects of this application are to abate the ſtiffneſs and pain of the joint, and to afford a greater latitude and extent of motion. This is often perceived after uſing it three or four times. As the effects of the remedy proceed, the ſoreneſs and ſwelling diminiſh, the nocturnal pain, which is often very diſtreſſing, abates, the power of ſupporting the body on the lower limbs, on the affected ſide, increaſes, the legs, whether ſhorter or longer, approach towards their proper di-

 menſions,

menſions, and the muſcles, that were let down and waſted, regain their natural ſhape, firmneſs, and plumpneſs.

If the uſe of the waters ſucceeds as favourably as is above deſcribed, we ſeldom interfere farther, and have frequently the ſatisfaction to ſee a perfect cure performed by them, and ſometimes in caſes which, at the commencement of the trial of the remedy, did not appear very promiſing.

It happens, not unfrequently, that the waters will ſhew their beneficial effects to a conſiderable extent for ſome time, and then the amendment ſeems to be at a ſtand; but ſtill without any acceſſion of new morbid ſymptoms, or without any aggravation of the old. In ſuch caſes we find it requiſite to ſuſpend the uſe of the waters for ſome time, and to apply a bliſter upon the ſeat of the pain; after the healing of which, we often find the application of the waters may be repeated with advantage.—But the ſtate and condition of the patient does not always allow us to purſue ſuch an eaſy courſe of practice as is juſt deſcribed. It ſometimes happens, that the irritability of the patient's nerves is ſo much excited by the uſe of the bath, as to

render much caution neceſſary in the trial, eſpecially in females.—Sometimes it cauſes violent perſpiration, and much reſerve is neceſſary on that account. In inſtances of the latter kind, unaccompanied with fever, a light infuſion of the bark, with aromatics, is generally ſerviceable.

But the tendency to fever is moſt to be apprehended. If the ſpot where the uneaſineſs is felt, be externally ſore, and tender to the touch, the ſwelling and pain conſiderable, and eſpecially if the latter be much aggravated by ſlight motion, it is neceſſary to be on our guard, even though *no* acceleration of pulſe has *yet* taken place. Cupping-glaſſes with ſcarification, and even ſometimes without it, are applied in ſuch caſes with advantage; or, if the ſkin be too ſore or tender to endure, without much pain, the ſuction of a cupping-glaſs, a large number of leeches, ſometimes as many as fifteen, have been ſubſtituted in the place of the other, and repeatedly applied, and have proved of great ſervice.

In aid of theſe applications ſaline cooling purgatives, and the common ſaline draught, with antimonials, are adminiſtred with advantage.

 For

For the relief of the pain, which often ſubſiſts without fever, or at leaſt without any that is indicated, either by the tongue or the pulſe, we find it neceſſary to employ opiates. I have generally uſed Dover's powder with this intention, in the quantity of, from five grains to a ſcruple, once or twice in twenty-four hours, and commonly with good effect.

If theſe means prove effectual (as they often do) to procure the abatement of the ſymptoms, the bath is cautiouſly tried, the Croſs bath eſpecially, which is cooler than the other, and that for a ſhort time only, and directed to be conducted with as little fatigue and trouble to the patient as poſſible. If this can be borne without aggravating any of the ſymptoms, but rather with a ſoothing effect, it is directed to be repeated, after an interval of three or four days, repeating the purgative above-mentioned, occaſionally. When the bath can be borne with eaſe, we recommend the uſe of the pump in the bath, in which the impetus of the water thrown on the part affected is leſs than in the dry pump *, as the ſtream

* It ſhould however be noticed, that the conſtruction of the dry-pump is ſuch, as to admit, with great eaſe and

ſtream is conducted to the part, beneath the ſurface of the water of the bath.

By theſe means, together with the aſſiſtance of a bliſter on the part, which I think ſucceeds beſt when the tendency to inflammation and fever has been ſomewhat abated by evacuations, we often render the application of the waters ſafe and effectual, in caſes that ſeemed at firſt view not to allow their uſe. To reduce the ſwelling, and to promote a reabſorption of the effuſed fluid, when that can be ſafely done, (as I have found it ſometimes

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and convenience, the water to be thrown on any part, to which its application is deſired, with a great latitude in the impulſive power. It flows through a long flexible leather tube, with a braſs pipe at the end, and may be conducted to any part of the body, at any angle, and of courſe, with almoſt any mitigation of the impulſe that may be required. It is well known that, the original impelling power being given, bodies ſtrike one another with a proportion of this power, according to the ſine of the angle at which they ſtrike. Thus if we ſuppoſe the perpendicular force of a ſtream of water falling on a plane ſurface to be as 40, the ſame ſtream ſtriking the ſame plane ſurface at an angle of 30 degrees, will act with a power of 20 only, the ſine of 30 degrees being to the perpendicular, or to the whole ſine, as 20 to 40, or as 1 to 2.

 may,)

may,) I have directed a trial of the lime-poultice, compoſed of one part of quick-lime fallen to powder in the air, and two parts of oatmeal, and this made into a poultice with hogs-lard, and ſpread about one-half an inch thick on a cloth, and applied, temperately warm, to the part. This may be repeated every night, and removed in the morning, and continued an indefinite time. It generally produces ſome degree of moiſture or exſudation under it, though without raiſing a bliſter, and this gradual local diſcharge is often an effectual, though gradual method of reducing tumours, both of the hip and of the knee. Vomits of turbith mineral have been ſometimes given in incipient white-ſwellings of the knee; I have ſeen them ſo adminiſtered, but without ſuch proof, either of their efficacy, or of their ſafety, as to encourage a trial of them in hip-caſes.

It happens indeed ſometimes, either from the diſeaſe being too far advanced before the patients are ſent, or from the tendency of the conſtitution to hectic fever, that ſuppuration will come on in ſpite of all our efforts to prevent it. Such caſes being no longer fit

ſubjects

ſubjects for a trial of the waters, are generally ſent home with as much attention as poſſible to their eaſe and comfort.

If weather, diſtance, or the violence of the diſeaſe will not admit of their removal, conſiſtently with their preſent ſafety, or with proper attention to their ſufferings, they remain at the hoſpital; and four inſtances of perſons who paid the laſt debt to nature under ſuch afflicting circumſtances, are recorded in the following table, and probably a ſimilar fate attended a large majority of thoſe who were ſent home with proof, or ſtrong ſuſpicion of matter being already formed.

TABLE of the State of the Patients at their Discharge, who were admitted into the Bath Hospital for Hip-cases, from May 1st, 1785 to April 7, 1801, classed according to their Ages.

Ages	Cured	Much better	Better	No better	Impro-per	Irre-gular	Dead	Total
Under 10 years		5	8	1	9			23
From 10 to 20	30	24	32	9	34		2	131
From 20 to 30	20	48	28	13	34	2	1	146
From 30 to 40	22	29	18	2	24	3		98
From 40 to 50	21	30	15	7	16	3		92
From 50 to 60	8	25	6	1	5	2	2. one of the small-pox.	4
From 60 upwards	2	7	4			3	1. of the small-pox	17
Total	103	168	111	33	122	13	6	556

It is proper to apprize the reader that by *cured*, in the second column of the foregoing table, is meant such persons who have completely recovered from their complaint, and who have *no* symptoms of the disease remaining,

maining, for which they were admitted. By *much better* is underſtood ſuch as have nearly recovered, but have ſtill ſome ſtiffneſs, debility, or other mark of the diſeaſe remaining. This term, however, is never applied, unleſs to ſuch as are nearly recovered, and never to crippled or helpleſs perſons, however ſuch may be circumſtanced with regard to health.

By *better* we underſtand perſons who have received obvious and material advantage, but who have nevertheleſs ſtrong marks of the effects of the diſeaſe. This term, however, is never applied to ſuch as, although they may have received ſome temporary alleviation of their ſufferings, ſtill labour under hectical or other ſymptoms, that indicate their health to be declining.

It is much to the credit of the Bath hoſpital, that a great degree of candour has been uninterruptedly preſerved ever ſince its foundation, above 60 years ago, in repreſenting the ſtate of the patients when diſmiſſed. Theſe, when minuted to be diſcharged by the attending phyſician, are again produced before ſome of the other profeſſional perſons, and examined as to the ſtate they were in when admitted,

mitted, which is compared with their ſtate when examined, and both theſe are compared with the report of their ſtate by the attending phyſician. They are again produced before the committee, and ſeparately and regularly examined as to the ſame points, and I have repeatedly witneſſed the committee requeſting the attendant phyſician, to alter the report, when it appeared to them that the amendment was more conſiderable than it was put down in the report, but I never knew the ſmalleſt hint offered that the ſtate of the patient was more favourably repreſented by the phyſician, than it ſeemed to merit, on the examination before the committee. In ſhort it has been the invariable rule to err, if at all, rather on the ſide of caution, than on the contrary extreme, and to repreſent ſuch patients only to have received benefit in any degree, whoſe caſes exhibited obvious and undeniable marks of amendment, not ſuch as are merely probable, or any-wiſe equivocal.

It appears from the foregoing report of the ſtate of the patients, that out of 556 perſons admitted into the Bath hoſpital for hip-caſes from May 1, 1785, to April 7, 1801—103,

or

or about 1. in 5.398 received a complete cure, that 168 or 1. in 3.03095 received great benefit, and were nearly recovered; that 111, or nearly one-fifth of the whole received ſome benefit, and that the aggregate of theſe three numbers, amounting in the whole to 382, or as 1. in 1.4555, or more than two-thirds received advantage from a trial of the remedy. Of the above numbers four only died in the hoſpital of the diſeaſe, a very inconſiderable proportion, 33 or nearly a 17th part of the whole were no better, 122 were deemed improper caſes for a trial of the waters, and 13 were diſcharged for irregularity.

By thoſe ſet down under the title *improper* are meant, in general, ſuch whoſe caſes were, on their firſt examination, or ſoon after it, thought to be improper ſubjects for a trial of the waters, as being in too advanced a ſtage of the diſeaſe, or from other circumſtances of their health that forbad the uſe of the remedy; much the greateſt part of whom ought not to have been ſent hither at all. In 97 of theſe out of 122, matter was diſcovered to be formed, or forming, very ſoon after their arrival, which of courſe rendered a trial of

the

the waters inadmiſſible. Theſe, therefore, ſhould be ſtruck out of the account, as proving nothing reſpecting the efficacy or inefficacy of the waters. The ſame, it is obvious, may be ſaid of the 13, who were diſcharged for irregularity, and indeed of thoſe who died, as four of theſe were, when ſent, not in a condition to be removed with ſafety and propriety, and two died of the ſmall-pox.—This takes off 141 from the liſt, and reduces the whole number, that ſhould be conſidered on this occaſion, to 415. The proportions then will ſtand thus.

Cured 1—in 4.1553 nearly.

Much Better } 1—in 2.54, or nearly two-fifths

Better 1—in 3.74.

Proportion of thoſe who received benefit to the whole number as—9 2048.—to 10. or above nine-tenths of the whole.

It is unneceſſary to obſerve how much the foregoing calculations, which are taken from the regiſter of the hoſpital, a moſt accurate and authentic medical record, are in favour of the efficacy of the Bath waters in hip-caſes, and it ſhould *be noticed* that they plead ſtrongly

ſtrongly for a trial of them in the early ſtages of the diſeaſe. It is more than probable that a large proportion of the unſucceſsful caſes, amounting in the whole to 159, including thoſe who were *no better*—*improper*—and thoſe who *died* of the diſeaſe, would have received relief, had a timely application been made to this remedy.

Very few of thoſe ſpecified as improper were ſuffered to make any trial of the waters, and in 97 of them, as I have before obſerved, matter was diſcovered at their arrival, or ſoon after, and the hectical ſymptoms precluded all hopes from the uſe of the bath, and indeed left little from the trial of any other means.

It appears that the Bath waters applied in an early ſtage of the diſeaſe have been nearly equally ſucceſsful at very different ages. Their good effects have been manifeſted as early as five years old, and as late as 70 years, and the proportion of thoſe who received relief at 60 years old and upwards, was as large as in the early periods of life.

The average ſtay in the hoſpital, of the firſt thirty of the perſons *cured*, is 105 days, of the ſame number of thoſe who were diſ-

charged

charged *much better* 155 days, and of the ſame number of thoſe who were diſcharged *better* 138 days nearly. The average of the ſtay of thoſe who were benefited is nearly 133 days, or 19 weeks.

It appears that the Bath waters are more ſucceſsful in hip-caſes at a warm time of the year than at a cold one, as is indeed the caſe with this remedy, when applied to other diſorders.

Of 88 perſons taken in order, who received benefit, and who were admitted in the months of April, May, June, and July, 25 were *cured*, 39 were *much better*, and 24 *better*.

Of 105 perſons received in October, November, December, and January, 25 were *cured*, 41 were *much better*, and 38 *better*.

It is obvious that a larger proportion of thoſe who were admitted in the ſpring and ſummer, and who had a proſpect of a ſeries of warm weather, received a greater degree of benefit than thoſe who were admitted in the autumn and winter.

I have thus finiſhed my remarks on the tables, and truſt I have eſtabliſhed the efficacy

of

of the Bath waters in this obſtinate, painful, and dangerous diſeaſe.

They are undoubtedly very effectual, but much time is uſually neceſſary to complete a cure; and indeed, it needs be no cauſe of ſurpriſe, that a diſeaſe ſhould take up as many months in its cure, as in ſome inſtances it has laſted years before the remedy was applied. In very recent caſes I have ſeen a few weeks complete a cure.

I ſhall next add a few remarks on the hiſtory of the diſeaſe, as deſcribed by former writers, and the indications of cure, which they recommend or ſuggeſt.

The diſeaſe of the hip-joint was not unnoticed by Hippocrates. In his treatiſe on * internal diſorders, there are ſeveral † chapters on this ſubject under the name of Ισχιας.—He ſays that it ſometimes happens from long expoſure ‡ to the ſun's heat, no improbable cauſe in a hot climate. It is deſcribed as accompanied with a difficulty of turning, or even

* περι των εντος παθων.

† Cap. LIV. LV. LVI. LVII. LVIII.

‡ ην ελθη εν ηλιω πολυν χρονον. Hipp. ut ſupra, Cap. LIV.

of

of * moving the hip-joint, on account of the pain and ſtiffneſs. The former of theſe is deſcribed to be in the † back and loins, thoſe parts eſpecially, which are connected with the hips, and alſo in the knees. Sometimes the pain is in the ‡ groin, as well as in the hip, and when that is the caſe, it is aggravated by raiſing the body from an inclined to an erect poſture, or on moving ſideways. The pain he deſcribes as acute, and accompanied with a ſenſation of heat. In ſome inſtances it is attended with convulſion ‖ of the part, with rigor and other ſymptoms of fever. He obſerves that many become § lame from this diſeaſe, and that an anchyloſis of the joint is

* ὁ γαρ νοσεων ϛρεφεσθαι η κινεειν τα αρθρα ου δυναται υπο της εν αυτοισιν αλγηδονος και του ξυμπεπηγεναι τους δακτυλους. Hipp. ut ſupra.

† αλγεει δε μαλιϛα την οσφην και τους σπονδυλους τους εκ πλαγιων των ισχιων και τα γονατα.

‡ ιϛαται δε οδυνη εν τοιϛι βουβωσι πλειϛον χρονον αμα και τοισι ισχιοισιν οξειη και καυματωδης, κην τις αυτον ανιϛη η μετακινεη υπο της αλγηδονος οιμωζει οκοσον αν μεγιϛον δυναται.

‖ ενιοτε δε και σπασμος επιγινεται και ριγος και πυρετος. Cap. LIV.

§ εκ ταυτης ουν την νοσου πολλοι χωλοι εγενοντα. Cap. LIV.

a com-

a common * conſequence. He adds that it is a complaint of † long duration, and difficult to cure. The above account of the diſeaſe, though incomplete, is, as far as it goes, perfectly correct and agreeable to modern obſervation. The ſpaſm or convulſion of the part, though little noticed in modern accounts, is, when combined with fever, as it is here deſcribed, not an uncommon ſymptom, and uſually indicatory of ſuppuration.

The method of cure, which he propoſes, is more exceptionable on account of the articles, which made a part of the Materia Medica then in uſe, than it is on account of the indications which he directs to be purſued. He recommends a vegetable ‡ and milk diet, the repeated application of || fomentations, the uſe of purgatives, eſpecially of purging clyſters, the application of cupping veſſels to the part affected, and the drawing blood from

* Ην δε ξυμφυη και τα αρθρα ξυμπαγη πασα αναγκη χωλον γενεσθαι τον ανθρωπον. Cap. LVIII.

† Ηδε νουσος χαλεπη λιην εςι και χρονιη. Cap. LVIII.

‡ Σιτω δε και μαζη χρεεσθω μαλθακη ατριπτω, C. LIV. και γαλακτοποσιην. C. LIV.

|| Πυριησαι και σικυην προσβαλλειν και φλεβοτομεειν τας εν τησιν ιγνυησι φλεβας. C. LVII.

Εν τουτω κλυξειν. C. LIV.

the veins in the hams. To this he adds a recommendation to move the * joint frequently, to prevent an anchylosis. In some cases he advises suppuratory discharge to be made from the pained part by † means of several deep sores or ulcers to be produced either by burning the part, with fungous substances, suffered to consume slowly on it, or by means of a hot iron, or actual cautery. The plan of cure here laid down, is in a great measure agreeable to modern practice. Low diet, local bleedings, purgatives, clysters and fomentations, are our principal resources at present, as much as they were 2,500 years ago. Issues, indeed, and suppuratory discharges where thought necessary, are made in a manner less painful and terrifying, but the purpose aimed at, is pursued by discharges of the same kind.

Hippocrates, in the third section of the fifth Book of the Epidemics, relates a case

† Ην δε μη δυναται ιστασθαι, εν τη κλινη χρη περιφερειν ως πυκνοτατα—οκωσαν εντος μη ξυμφυη ο χονδρος. C. LVII.

† Καυσαι αυτον τα μεν οστωδεα μυκησι ταδε σαρκωδεα σιδηροισι, πολλας εσχαρας και βαθειας. C. LVI.

where the pain was ſituated in the groin, and alſo in the hip-joint, in both of which a ſuppuration was formed.

Purgatives and bleeding were tried, but in vain, and the patient died at laſt, of the weakneſs occaſioned by the exceſs of the purulent diſcharge. This caſe appears to me to have been rather a pſoadic abceſs than a hip-caſe.

In the ſucceeding caſe, which is more decidedly of the iſchiadic kind, Hippocrates appears to have been more ſucceſsful.

He, however, remarks that in this inſtance the pain that extended down the leg was not violent, and no ſuppuration was formed, nor was the general health of the patient * affected. Purgatives, bleedings, and cupping were the remedies employed, which proved effectual towards a cure.

In the ſixth ſection of the Aphoriſms of Hippocrates, there are two that refer to this diſeaſe, which I think have been miſtaken by the tranſlators, who have expreſſed themſelves as if there was an entire diſlocation of

* Και ουκ εγενετο εμπυης, υγιης δε πολλω χρονω, Epid. V. §. 3.

the head of the bone, when the word * implies no more than a projection, which is indeed, a partial diflocation. The meaning of Hippocrates is I think clear enough, that if the head of the thigh bone be at firft confiderably protruded, or, as he expreffes it, " ftands out," and again finks back (fuddenly is I think implied) into the focket or acetabulum, it indicates a fuppuration to have taken place, and this I take to be true, provided, as we may reafonably fuppofe, that Hippocrates meant, that there be no general amendment, or abatement of the fymptoms. The membranes which were at firft thickened by inflammation, and which thruft the head of the bone outwards being melted down by fuppuration, allow it to fall back again into the focket, from whence it had been pufhed by the thickening of the periofteum, or of the lining of the cotyloid cavity. The fucceeding aphorifm implies no more, than that hipcafes of long continuance accompanied with a projection of the head of the bone, are apt to induce lamenefs and wafting of the limb, unlefs a cautery be ufed.

* Εξισαται—exiftat – ftands out or projects—literally tranflated.

Celſus * appears to have been acquainted with the diſeaſe, but has left little concerning it.

He obſerves, that it is of the chronical kind, very painful and weakening, and in ſome inſtances mortal. He recommends firſt fomentations, then warm cataplaſms, and afterwards the application of cupping veſſels, and of a † plaiſter of hot brine, a remedy, yet in uſe in ſome parts of our own country, for local pains. If theſe fail, he directs the uſe of the actual cautery, and that the ulcers it produces ſhould be kept open a long time.

Cælius Aurelianus is more diffuſe, both reſpecting the nature and deſcription of the diſeaſe, and the means of cure.

He ſpecifies ‡ cold as the principal cauſe, eſpecially as produced by ‖ lying on the ground, or digging in § moiſt earth, by ſuch as are unaccuſtomed to work in that man-

* L. IV. c. 22.

† Sale calido et humido utendum eſt. Celſ. ut ſupr. cit.

‡ Perfrictio profunda—frigoris ſuſceptio.

‖ Terrena cubatio.

§ Inſueta humi foſſio.

ner. To theſe he adds, accidents by falls or * blows, violent ſtrains from exerciſe, or exertions to lift † weights beyond the ſtrength. He remarks, that it occurs at every time of life, but more commonly in middle age ‡, that it ſometimes affects both ſides, and calls it, when it appears in that form ‖, Iſchias duplex. He deſcribes the ſymptoms to be, a ſenſe of weight in § the part, and difficulty of motion, and in ſome a ſlight torpor ¶ and prickling ſenſation attended by a ſenſe ** of heat, fever and reſtleſſneſs, accompanied by a pain ſtriking through the middle of the †† nates,

* Aut caſus vel repentinus percuſſus.

† Ponderis levandi ex interioribus conatio.

‡ Fit præterea in omnibus ætatibus ſed præcipue in mediis.

‖ There is a man at preſent in the Bath hoſpital, who is affected in this manner by working up to his middle in water, a cauſe which it is evident muſt operate on both ſides alike.

§ Gravedine et difficili motu. Cœl. Aurel. morb. chron. Lib. V. Cap. I.

¶ Levi torpore et formicatione.

** Quibuſdam cum vehementi atque pungenti, atque fervido dolore.

†† Uſque ad mediam natem et ſuperius ad inguen vel ad anealem perveniens, atque ſuram, dehinc etiam talum, et pedis ſummitatem.

nates, and from thence upwards towards the groin, and defcending from thence through the calf of the leg, to the ancle and the foot. This is fucceeded by a * wafting of the leg and thigh from the nates downwards, attended with weaknefs, and fometimes with † a fhortening, and at others with a lengthening of the whole limb. He defcribes the perfons fo affected as unable to begin ‡ to move without pain and difficulty, but thefe fomewhat abate on continuing the motion. They are, however, often obliged to ftop ‖ fuddenly in walking, and when they attempt to renew the motion, they find the fame difficulty as at firft. They are unable to fet the § foot

* Cruris totius tenuitas fit, quam Græce atrophiam vocant, incipiens a clunibus.

† Brevitate cruris, aut ultra naturam diftenfione fuffecta.

‡ Initia motus impediantur fervore partium atteftante, ac fi perfeverans fervor fuerit, motus facilior fit.

‖ Tum rurfus fubfidunt vel intenti refiftunt repente tanquam fuerant necdum graffu tentato.

§ Ambulant quidam capitibus digitorum gradientes, alii extenti quidem fed finuatis clunibus ut neque fe pronos inclinare valeant, alii contracte atque conducte qui pejus omnibus habere nofcuntur.

firm and flat on the ground, but are obliged to walk on tip-toe, ſometimes with the legs extended, but with the nates preſſed inwards ſo that they are unable to bend forward. Others have their legs drawn cloſe together, which is eſteemed among the worſt ſymptoms.

He ſuppoſes the ſeat of the diſeaſe (and as I think rightly) to be in the * periosteum or rather the cartilage, covering the head of the thigh bone, which, when the diſeaſe becomes aggravated †, generates matter and ſanies, and forms abceſſes. The above account is all that is material which I have been able to collect from this writer, and argues him to have been well acquainted with the nature and ſymptoms of this diſeaſe, and the indications of cure, which he lays down, appear to me to be ſufficiently judicious, and indeed agreeable to modern practice.

* Patitur autem principaliter membrana quæ oſſa circumtegit quam Græce perioſteon vocant.

† Denique augmento paſſionis, intercreatus humor et frequenti dolore corruptus in ſaniem tranſiens, partes aliquas collectionibus afficit.

N. B. All the paſſages quoted from this author are from L. V. C. 1.

He

He directs the patient to be laid on a * soft bed in a warm place, and to use abstinence and rest. The part affected is ordered to be covered with soft wool moistened with warm sweet oil. He also recommends a vapour bath, and a fomentation of the oily kind. Bleeding †, a spare diet and clysters, are also recommended, and the latter, not merely as evacuants, but as acting in the capacity of an internal fomentation, gentle ‡ laxatives are prescribed, but strong purgatives forbidden. If the pain resists these remedies, he advises scarifications (probably with a view to cupping) of the part ‖, and leeches, together with a fomentation of sponges soaked

* Facere faciamus ægrotantem mollioribus stramentis calido in loco adhibita, abstinentia et requie usque ad primam diatreton. Tunc lanis mollibus ac limpidis oleo calido dulci prætinctis dolentia loca contegenda adhibenda, etiam fomentatio juges ex oleo dulci calido item vaporationum commutatio.

† Phlebotomia tempore consueto.

‡ Adhibenda injectio—quo pariter fota atque vaporata interiora laxamento consentiant.

Tentanda denique ac properanda sequentibus diebus facilitas ventris.

‖ Adhibenda scarificatio. Hirudines etiam adhibendæ.

in

in * warm water, probably to encourage the bleeding.

The actual cautery † is alſo recommended to be applied in ſuch a manner, as to raiſe a ſuperficial inflammation, but not to deſtroy the ſubſtance of the part to which it is applied. The fungous excreſcences ‡ of trees are recommended for the ſame purpoſe to be placed on the part affected, and ſlowly conſumed thereon. A cataplaſm of muſtard directed to raiſe a bliſter, or one of muſtard, quick-lime and ſulphur made up with oil and water ||, and in effect probably not very un-

* Tunc vaporatio ſpongiarum ex aqua calida.

† Tunc cauteres longi atque igniti immittendi, qui quidem cutem tangere minime debent.

‡ Alii ligneos fungos inferius ac ſuperius anguſtos formantes patientibus apponunt locis, quos ſummitate accenſos ſinunt concremari donec cinereſcant et ſponte decidant.

|| Sinapi admiſcentes glebæ calcis æquis ponderibus ad ſulphuris partem et ſimul conterentes parvo oleo et aqua admiſta.

A bag of hot ſalt is adviſed much in the ſame way as directed by Celſus, as above cited. Oportet ſacellum linteum implere ſale torrido et apponere patientibus partibus.

like

like to the lime-poultice above deſcribed, but as it ſhould ſeem more acrimonious.

Such is the baſis of the practice recommended by this writer, which is ſelected from a farrago of ſtrange frivolous additions, expreſſed in a dialect uncouth, and difficult to be comprehended, but ſtill not ſo obſcure as to prevent our diſcovering that the author was well acquainted with the appearance of the diſeaſe—with its nature—and with the objects proper to be purſued, in order towards its cure.

To come to modern times: it is ſomewhat extraordinary, that Boerhaave and his commentator Van Swieten, who paid ſo much reſpect to the ancient writers, and ſo frequently cite them, ſhould have neglected the information they communicate, and have confounded this diſeaſe with rheumatiſm and ſciatica, with which it has little or no connection, and from which it is clearly diſtinguiſhed by the writers of antiquity. Van Swieten, appears to have borrowed moſt of his information on this ſubject from Columnius, who probably had often ſeen the complaint, but neither Boerhaave nor Van Swieten give any deſcription of it, nor ſuggeſt any remedies

dies or indications of cure worth repeating in this place. M. De Haen, has left a Treatiſe of 38 pages de Morbo Coxario, but I can diſcover little in it that can aſſiſt us either in diſtinguiſhing, or in curing the diſeaſe. I even doubt if he was properly acquainted with it, as diſtinct from rheumatiſm and ſciatica, and the effects of external violence. He never mentions cold among the cauſes, although the moſt common of any. He, however, remarks the partial diſlocation *, occaſioned by the enlargement of the ſynovial gland at the bottom of the acetabulum, by which the head of the thigh bone was thruſt upwards, and the limb ſhortened.

His method of cure is founded on a blind veneration for the writings of Hippocrates, whoſe opinions, though curious and far ſurpaſſing what might have been expected at ſuch an early age, and under other diſadvan-

* Tumida admodum glandula in cavo acetabuli ut caput oſſis femoris intra illud excipi non poſſet.—Unde demum caput oſſis femoris ex cotula trudi cœptum crus ſenſim brevius redditum, et integra ſed extenſa adhuc capſula idem caput oſſis ad ſuperiorem cavi acetabulo marginem applicatum. *De Haen de Morb. Coxar.*

tages,

tages, it were abſurd to introduce to ſuperſede modern experience and obſervation, which has added much to the hiſtory of the diſeaſe itſelf, and ſuggeſted means of relief more effectual, as well as more eaſy to the feelings of the patients, than the coarſe and painful applications recommended by the older writers.

Mr. Sauvages ſeems to have had only a groſs and indiſtinct idea reſpecting this complaint.

The ſpecies called the Iſchias ex Abceſſu, and the Iſchias rheumatica, come the neareſt to the one here under conſideration, but the former is little more than an advanced ſtage of the diſeaſe, and the latter is erroneouſly connected with rheumatiſm, and both of them are ſo imperfectly deſcribed, as to make it doubtful if the author had any perſonal experience reſpecting it.

Dr. Cullen has not included Iſchias among his genera or ſpecies morborum, but confounded it with rheumatiſm with which it has no connection.

Dr. Francis Home, profeſſor of Materia Medica in the Univerſity of Edinburgh, has noticed this diſeaſe in his chemical experiments

ments and hiſtories, and has produced ſeven caſes to prove the efficacy of the oleum terebinthinæ. I have no experience of the remedy, but am confident moſt of the caſes ſent to the Bath hoſpital would not admit of the trial of ſuch a medicine without danger. It ſeems very doubtful to me if any of thoſe he deſcribes were properly iſchiadic caſes, except the two firſt, and even thoſe are not decidly ſo.—According to his experience men are more ſubject to it then women, and this nearly in the proportion of five to two. This coincides nearly with my own obſervation. Of 556 patients, 413 were men, and 143 women, which is nearly as 5 to 1.7312.

His next concluſion is altogether confuted by the foregoing table.

He ſays, "that it is a diſeaſe of advanced age, and that he does not recollect ever ſeeing one in this diſeaſe in the vigour of life." Unfortunately for this obſervation it happens, that of 556 patients, 375, or more than two-thirds, were from 10 years old to 40, an nterval that certainly includes the prime and vigour of life. The Doctor's experience in this complaint was too limited to warrant his con-

conclufion. The late Dr. Charleton, who was himfelf many years phyfician to the Bath hofpital, and had frequent opportunities of feeing this complaint, has given (collaterally) a brief, but, as far as it goes, a very accurate, account of it, which is indeed the firft I have feen which bears the marks of extenfive perfonal experience.

The method of ufing the waters, which he recommends, is nearly the fame with the one above-mentioned *.

* Dr. Charlton fays, that " Dr. Oliver juftly remarks, that when the cafe is recent, and the patient young, our waters frequently affect a cure. To which he adds, that when the difeafe has been of long ftanding, they feldom do much fervice; and, if the parts are much inflamed, but particularly if matter is formed, the ufe of them is highly injurious. Recent cafes in all difeafes admit moft eafily of relief, but in the prefent, we need not defpair from the long continuance of the difeafe, provided it has not advanced to the ftate of fuppuration, and hectic fever. A man now in the hofpital, is in a fair way of being relieved, though his complaint is of four years ftanding, and indeed moft of them are from twelve months to two years duration.—It is not the long continuance of the difeafe, but the advanced ftage of it, that renders the trial of the waters improper.

It

It appears from his account, that the number of hip-cafes fent to the Bath hofpital, in twelve years, namely, from May 1, 1761 to May 1, 1773, amounted to 296, of whom 192 were cured or benefited, two received no benefit, two died, one was difcharged for irregularity, and ninety-nine were improper. The proportion of the perfons benefited to the whole number admitted, is greater in the table I have exhibited above, than in Dr. Charleton's account.

Either of them, however, fufficiently prove the efficacy of the Bath water in relieving fuch cafes.

Mr. Edward Ford, furgeon to the Weftminfter general difpenfary, publifhed, A. D. 1794, a work, intitled, "Obfervations on the Difeafe of the Hip-joint, &c."

This gentleman has given a good defcription of the difeafe, and has added feveral ufeful plates, particularly the firft which fhews the ftate of the mufcles covering the nates, and thofe immediately below them, which afford fome of the earlieft and moft decifive figns of the prefence of the difeafe.

His indications of cure appear to me to be proper and judicious; I am however, inclined to think that he places too much dependance on the benefit to be derived from iſſues, and too little on the effects of the warm bath.

Had he conſidered Dr. Charleton's report of the proportion of thoſe benefited by the warm bath, he would probably have ranked it higher in his eſtimation. I have thus finiſhed what I mean to ſay on this ſubject. I have endeavoured to be as conciſe as poſſible, conſiſtent with a ſufficient explanation of my meaning. I have candidly ſtated the facts that have fallen under my obſervation, having no temptation to make an empirical diſplay of the advantages of the remedy, but merely wiſh to lay before the public, from evidence not to be queſtioned, ſuch an account of its effects, as may aſſiſt thoſe who are intruſted with the care of perſons ſo affected, to form their own judgment on the probability of ſucceſs in each individual caſe.

I cannot, however, conclude without earneſtly recommending to thoſe to whom the

teſtimonies above recited appear ſatisfactory, to make a trial of this remedy, in as early a ſtage of the diſeaſe as poſſible; ſince, if it be delayed to a late period, it will ſerve only to aggravate miſery, and haſten diſſolution.

ARTICLE XIX.

Obſervations on the Poſition of Patients in the Operation for Lithotomy, with a Caſe.

By NATH. SMITH, M.D. &c.

Of Hanover, State of New Hampſhire.

[Communicated in a Letter to Dr. LETTSOM.]

READ, JUNE 14, 1802.

Hanover, State of New Hampſhire,
Dec. 19, 1801.

SIR,

More than four years have elapſed ſince I had the honour to be elected correſponding member of the London Medical Society; and though I have not before made any communication to that Society, I hope my exertions have not been wholly loſt.

On my return from England, a Medical Inſtitution was eſtabliſhed at Dartmouth College. We have delivered one courſe of

lectures annually, on the different branches of this science, illustrating the modern and most approved theory and practice.

Several cases of disease, worthy of some notice, have fallen under my observation.

Eight weeks ago, I performed the operation of lithotomy on a man 72 years of age; he had been afflicted for two years, with calculous symptoms.—His limbs had also become so inflexible, by rheumatic affections, that his thighs could not be separated more than six inches, nor his knees bent but very little;—and thus his lower limbs could only be brought to about a right angle with his body. Under all these embarrassing circumstances, he was determined on the operation; which I accordingly performed, and extracted *forty-seven* stones from his bladder.—I have herewith forwarded two, one of the largest, and one of the smallest size.—On breaking them you will find a *nucleus*, as large as a small cherry-stone; and in this *nucleus* you will find another, about the measure of a small pin's head. Such is the structure of all I have examined.

The

The patient had no bad ſymptoms after the operation; and is now almoſt entirely recovered.—One circumſtance, in this caſe, perhaps, deſerves more particular notice; by the inflexibility of his limbs, the patient could not be placed in the poſition recommended by Mr. Bell, for the operation of lithotomy.—We could only bring, as I obſerved, his lower extremities to nearly a right angle with his body; which were ſupported, in that ſituation, by an aſſiſtant, ſtanding with one foot on each ſide the body, with his back toward the patient's head.

The patient was placed on a bed, properly raiſed, and ſo inclined that his hips were conſiderably higher than his head; his ſuperior extremities being left entirely free.—In this ſituation, the buſineſs was conducted with the greateſt eaſe and ſafety.

Two aſſiſtants, one on each ſide, were required to retract the ſkin and cellular ſubſtance as they were divided, this poſition not rendering the parts ſufficiently tenſe to recede without ſuch aid.—The gorget being fixed in the ſtaff, the operation was finiſhed with equal facility, as if the patient had been placed in the uſual poſition.

After performing this operation, it occurred to me that authors have erred in eſtabliſhing a general rule; that, in operations for the ſtone, the patient ſhould be placed on a table, with his hands tied to his feet or ancles.—This poſition muſt be painful, and I believe dangerous, eſpecially to corpulent perſons; it will compreſs the abdomen, and force the viſcera, contained in that cavity, upon the ſuperior part of the bladder; thus expoſing them to be wounded by the gorget.

I believe, in ſome caſes, it has deranged the bladder, and rendered it difficult for the forceps, when introduced, to ſeize the ſtone.—I once operated on a corpulent man; after puſhing the gorget into the bladder, I introduced a ſtraight pair of forceps; but could not, in repeated trials, touch the ſtone. Afterwards, by a large pair of curved forceps, I found it towards the pubis, and extracted it with difficulty; the patient died. In this caſe, I apprehend, if the patient had been placed on an inclined plane, with his ſuperior extremities free, the ſtone would have fallen back towards the ſpine; ſo that the ſtraight forceps would have reached it.

I know

I know of no advantage in confining the hands of perſons ſubjected to this operation, unleſs to prevent their reſiſting the operator; and this can only be neceſſary with very young ſubjects, in which caſes, the uſual ſituation is more tolerable.

Perhaps I am too precipitate in my concluſions; but I ſhall, in future, leave the hands of my patients at liberty, while under the operation of lithotomy.

I am, very reſpectfully, Sir,

Your moſt obedient and humble ſervant,

NATHAN SMITH.

ARTICLE XX.

Case of a great Enlargement of the Scrotum.

By F. RIGBY BRODBELT, M.D. &c.

Of SPANISH-TOWN, JAMAICA.

READ, FEB. 24, 1800.

Thomas Rivers, æt. 50, a negroe, laboured under gonorrhæa ſome years ago, which occaſioned ſtrictures in the urethra. This latter affection was treated in the uſual manner, by bougies, which ſo far relieved the complaint, that the patient was able to paſs his urine in a pretty full ſtream.

In this ſtate he continued for eight years; at which period, four years from the preſent time, he received in riding a violent bruiſe on the right teſticle, from the pummel of the ſaddle, which occaſioned great inflammation and pain. Theſe ſymptoms, although painful, gave way without producing any apparently alarming conſequences, when twelve months from

from the accident, tumefaction took place in perinæo, and was ſoon ſucceeded by abſceſs and fiſtula. From this period the ſcrotum began to enlarge, which it has daily continued to do; and although for ſome time paſt, the increaſe has not been ſo rapid as at firſt, yet it is even now ſufficiently perceptible.

To the feel the ſwelling is in general ſoftiſh, but there are ſome places which are much indurated. To appearance the tumor ſeems to be of the nature of ſteatoma; and its very great bulk affords an inſtance of an organ originally ſmall being capable of great change by diſeaſe *.

There are ſeveral apertures at which the urine eſcapes, and ſome of them are even ſituated at the moſt interior and ſuperior part of the tumor; but for the moſt part, the urine paſſes by fiſtulæ, in the poſterior and inferior part of the ſwelling.—The patient alſo diſcharges a ſmall quantity by the natural paſſage.

* On meaſuring the ſcrotum, I found that along the courſe of the raphe, from the anus to the inferior part of the penis, meaſured two feet ten inches.—In the tranſverſe direction it meaſured three feet eight inches.—From one groin to the other, along the circumference of the tumor, four feet.

The

The left tefticle can readily be difcovered *in fitu*, but the right, on which the injury was inflicted, cannot be felt.

Although the tumor has already rifen to a fize uncommonly large, it is for the moft part indolent, and when pain is occafioned, it is chiefly in perinæo and in the loins, arifing probably from the acrimony of the urine, and the weight of the tumor.

This inconvenience, however, is much remedied by a large fufpenfory bandage, which enables the poor man to move a little from one place to another.—The functions of the patient are natural, and any deviation from the moft perfect health feems to arife more from his fedentary life, than from the complaint.

REMARKS.

Although fiftulæ in perinæo are very diftreffing and tedious complaints, and feldom produce much enlargement of the fcrotum, yet from the above related cafe, we have reafon to think that this uncommon appearance took its rife from the fiftula in perinæo. —It is not eafy to account for this enlargement from the influence of the urine, as the ufual

ufual effects of urine, depofited in cellular membrane, are well known.

But, as the fwelling commenced as foon as the urine had infinuated itfelf into the cellular fcrotum, we muft fuppofe that in this patient, from fome peculiarity of conftitution, the urine, by inflaming the parts, caufed it to put on this appearance, inftead of producing a more ferious termination, by gangrene.

In the Weft Indies, but particularly in Barbadoes, the negroes are much troubled with an enlargement of the fcrotum, whether arifing from an increafe of the teftis, or of the fcrotum, I am ignorant, probably from both.—The hydrocele is alfo prevalent, and in this ifland, from a venereal caufe, it is not uncommon to fee the tefticle and fcrotum much enlarged, indurated, and ulcerated, putting on the appearance of cancer, which, however, gives way to a well directed courfe of mercury. Whether the difeafe of our patient had imbibed any of thefe peculiarities of a warm climate, or is to be efteemed an accidental occurrence, I cannot prefume to determine.

April, 1797.

Since

Since writing the above caſe the man returned home, and remained for ſome months nearly in the ſame ſituation; but I have been lately informed that he died a ſhort time ago, the tumor having been attacked with gangrene in ſeveral places, probably at thoſe apertures through which the urine eſcaped.

F. RIGBY BRODBELT.

Spaniſh-town, Jamaica,
Jan. 1, 1798.

ARTICLE XXI.

Two Cases of Diabetes, with Obſervations on the different States of this Diſeaſe.

By JOHN BOSTOCK, M.D.

Correſponding Member of the Society.

One of the Phyſicians to the LIVERPOOL Diſpenſary, &c.

READ, NOV. 14, 1804.

CASE I.

J. R. aged 30, of a delicate habit of body, and rather below the middle ſize, had enjoyed good health until about ſix months ago, when he began to experience great weakneſs, which encreaſed ſo much, that in a ſhort time he was unable any longer to purſue his uſual occupations. The only cauſe to which he can attribute his complaints is, that previous to their commencement he had worked unuſually hard, had conſequently ſweated much, and in that ſtate had drank very copiouſly of butter-milk and water. His firſt morbid ſymptoms

ſymptoms were general weakneſs and great thirſt, accompanied with a heat and dryneſs of the mouth; his appetite became, about the ſame time, unuſually voracious; and ſoon after he perceived an increaſe in the quantity of his urine.

At preſent he principally complains of weakneſs and thirſt; his appetite is greater than natural, and he has occaſional uneaſineſs about the ſtomach. He has had, for the laſt few days, a diarrhæa attended with griping pains in the bowels. In the morning he expectorates a large quantity of a ſweetiſh-taſted mucus, which is ſometimes ſtreaked with blood, but he imagines that the blood proceeds only from his gums. Although his thirſt is ſo urgent, and he has a conſtant ſenſation of dryneſs in the fauces, yet his tongue is moiſt and peculiarly clean. The teeth feel ſore, and the gums are ſpongy, and inclined to bleed. His ſkin is dry, and he appears never to perſpire. In a morning he has frequent cramps in the calves of the legs. He is much emaciated, the muſcular debility is conſiderable, and is rapidly increaſing. His temperature is uniformly below the ſtandard

 of

of health, varying from 92° to 94°. The pulſe is regular and of the natural ſtrength; the reſpiration is alſo natural.

The quantity of urine which he voided in the 24 hours was about 8 quarts; it was of a light primroſe or ſtraw colour; when viewed acroſs the light it was ſlightly opake, and when agitated ſomewhat mucilaginous. Its odour was not in the leaſt urinous; it reddened litmus. Its ſpecific gravity varied from 1.026 to 1.041. When a quantity of it was kept in a temperature of about 60°, fermentation commenced in a few days, and in a week its ſurface was covered with a thick ſtratum of yeaſt. The clear fluid being then ſeparated, it exhibited all the properties of a weak vinous liquor, and it remained for ſome months, without undergoing any farther change.

2240 grains of the urine were ſlowly evaporated; a matter, in conſiſtence and ſmell exactly reſembling a thick ſyrup, was produced, which weighed 248 grains. The ſyrup being then expoſed to the atmoſphere, in a few days a number of ſolid particles were formed in it; theſe increaſed in ſize, until

until at length the whole was converted into a mafs of a granulated texture, which in its external appearance was very fimilar to manna. When reduced to powder it exactly refembled a fine brown fugar. It fhewed no tendency to deliquefce, nor did it experience any change after being expofed for many weeks to the atmofphere.

If we fuppofe an ounce of this patient's urine to weigh 550 grains, and that 8 quarts are evacuated in the 24 hours, the weight of the whole urine difcharged during this period will be 140,800 grains. But the folid matter left by evaporation, amounted to $\frac{1}{9}$ of the whole weight, therefore 15,644 grains, or about $32\frac{1}{2}$ ounces of folid matter are removed from the fyftem in 24 hours. The average quantity of the urine in health is 40 ounces, which at 520 grains, per ounce, will in the whole make 20,800 grains. The folid matter contained in healthy urine, may be eftimated at $\frac{1}{30}$ of its weight, this will give in the 24 hours 693 grains, or $11\frac{1}{2}$ drachms of folid matter. It appears therefore, that in the cafe of this patient, about 31 ounces of folid matter, were every day carried off by the

urinary

urinary difcharge more than the quantity ufually removed by this channel. By proceeding upon the fame data we fhall alfo find the amount of the fluid difcharged by this patient very greatly to exceed the ftandard in health. If we eftimate, as before, the weight of the whole at 140,800 grains, and the folid part at 15,644, we have the quantity of fluid equal to 125,156 grains. From the fame method of calculation, we fhall find the watery matter difcharged in the ufual ftate, to be 20,800 grains, which quantity being fubtracted from the former, leaves an excefs of 105,040 grains, equal to nearly 219 ounces.

Portions of the frefh urine of 840 grains, each, were refpectively fubmitted to the action of the following re-agents; the fubftances were gradually added until a precipitate was no longer produced.

A. Potafh. F. Nitric Acid.
B. Ammoniac. G. Infufion of Galls.
C. Lime Water. H. Aq. Lyth. Acet.
D. Muriate of Barytes. I. Nitro-Mur. of Tin.
E. Acetate of Lead.

A. A precipitate, was produced in fmall quantity, and the odour of ammoniac was perceptible.

 B. The

B. The fluid was rendered ſlightly opake, and after ſome time a ſmall quantity of a precipitate was thrown down, which weighed about $\frac{1}{4}$ of a grain.

C. A precipitate was thrown down, which weighed about $\frac{1}{3}$ of a grain.

D. A precipitate was produced, in moderate quantity, which ſubſided rapidly; and when collected, weighed ſomewhat more than 3 grains.

E. A milkineſs was produced, and after ſome time a precipitate, which weighed about 4 grains.

F. When the acid was firſt added, there appeared to be a little nitrous vapor diſengaged; after ſome time a minute quantity of a brown precipitate fell down.

G. At firſt no effect was produced, after ſome time a very inconſiderable precipitate was formed.

H. The precipitate was very copious; 14 grains were collected, and a part adhered to the edges of the filter, which appeared as if coated with a varniſh of gum. The precipitate, when dried, was an earthy-like ſubſtance, of a light brown colour.

I. A

I. A copious precipitate was produced, which ſlowly ſubſided. Part of it adhered to the filter; 6 grains were collected, which when dried, formed a reddiſh-brown, brittle, ſemi-tranſparent ſubſtance.

By means of the ſix firſt of the above reagents, the reſpective quantities of the different ſaline matters contained in urine, are aſcertained; by comparing the above experiments with ſimilar ones, made by Mr. Cruickſhank *, it will appear, that the different ſalts exiſt in the diabetic urine, now under conſideration, nearly in the ſame proportion to each other, as in the healthy ſtate of the fluid, but that they amount only to about $\frac{1}{3}$ of the abſolute quantity. My patient was, however, at this time diſcharging above 6 times the natural quantity of urine, ſo that it would ſeem, that in this inſtance, twice as much of the different ſaline ſubſtances was evacuated, as in the healthy ſtate.

The infuſion of galls has been employed as a teſt of the quantity of jelly in the urine; the quantity, in my experiments, was ſo ſmall as to render it difficult to aſcertain the exact

* Rollo on Diabetes, p. 442—5.

amount, but after making allowance for the great bulk of fluid diſcharged, it may be inferred that the jelly was not evacuated in more than the uſual proportion.

The precipitate from healthy urine by goulard is very conſiderable, it ſometimes amounts to $\frac{1}{16}$ part of the weight of the whole urine employed. It ſeems not only to precipitate the muriatic and phoſphoric ſalts, but to unite with a great part, if not the whole, of the animal matter. I conceived this property to depend upon the power which goulard poſſeſſes of coagulating and precipitating mucilage, and as I found that it does not exert any action upon ſugar, even when mixed with mucilage, I had ſome expectation of being able, by means of this re-agent, to obtain, in a ſeparate ſtate, the ſaccharine matter contained in diabetic urine. A quantity of the urine, in which goulard produced no farther precipitate, was filtered and ſlowly evaporated. A dry, friable extract, was left, which in conſiſtence and texture conſiderably reſembled a fine brown ſugar. This extract was ſpeedily diſſolved, without effervеſcence, in diluted nitric acid; when kept for ſome time at the boiling

heat,

heat, no nitrous gas was extricated, nor was there any oxalic acid produced by a careful evaporation. The heat being ſtill farther increaſed, it was reduced to a black tenacious maſs, which exhaled a nauſeous, empyreumatic ſmell.

The precipitate itſelf was afterwards heated with diluted nitric acid. Upon the application of heat, the whole was diſſolved, except a ſmall quantity of a white powder; no nitrous gas was diſengaged. Upon cooling, ſome white cryſtals, compoſed of the nitrate of lead, were formed, but no oxalic acid, was produced. It ſeemed, therefore, that by the action of goulard, the ſaccharine matter, previouſly contained in the urine, was decompoſed, or at leaſt was ſo far altered in its properties, as to be no longer capable of affording oxalic acid.

The nitro-muriate of tin is an active precipitant of jelly, but has no effect upon the ſolution of ſugar in water. I therefore employed it with the ſame intention, that the goulard had been previouſly uſed, expecting that it might ſeparate the animal ſubſtances from the ſaccharine matter. A quantity of

diabetic urine, after the precipitate produced by the nitro-muriate of tin had been separated from it, was evaporated. A residuum was left, of the consistence of a thick syrup, which, in appearance, resembled that produced by the evaporation of the whole urine. A part of it being still farther heated, an acid vapor was disengaged, and the extract was converted into a dry, carbonaceous substance.

A quantity of the syrup-like matter was heated with nitric acid; by a slow evaporation crystals were formed, of a flat lamellated texture, exactly resembling those produced by the union of nitric acid and urea. A portion of these being added to lime water, a precipitate was thrown down, in small quantity, thus proving that they contained oxalic acid, though it was evident, both from the appearance of the crystals, and from the quantity of the precipitate, that it composed only a very inconsiderable proportion of their bulk.

The precipitate produced from diabetic urine by the nitro-muriate of tin, was itself afterwards heated with diluted nitric acid. Upon the application of heat, the vapor of the

the nitro-muriatic acid was disengaged, the substance assumed a white colour, but it remained, for the most part, undissolved. No crystallization was produced by the evaporation of the acid; but upon the addition of potash, a small quantity of a white powder was thrown down. The effect of the nitro-muriate of tin upon the urine was somewhat similar to that of the goulard. The greatest part of the saccharine matter was either decomposed, or had entered into some new combination, so as to be no longer capable of forming oxalic acid. The urea, however, was left in the fluid unchanged, and exhibited its usual properties, when subjected to the action of the nitric acid.

The solid extract left by the evaporation of this urine appears to have amounted daily to 32½ ounces, which is about 31 ounces more than the quantity usually discharged. The proportion which the salts in the urine bear to the urea has been variously estimated; according to Mr. Cruickshank, the weights of each are nearly equal *, whereas M.M. Fourcroy and Vauquelin, suppose the saline sub-

* Rollo on Diabetes, p. 439.

ſtances to be only $\frac{1}{20}$ of the weight of the extract *. This latter calculation I am inclined to believe is ſomewhat exaggerated, although certainly much nearer the truth than that of Mr. Cruickſhank. Upon the whole, I think we may ſtate the proportion at about $\frac{1}{10}$. Suppoſing the average quantity of ſolid matter daily diſcharged by the urine in health to be 693 grains, the different ſaline ſubſtances will be 70 grains; and according to the experiments related above, in this diabetic patient they would amount to twice that quantity, *i. e.* to 140 grains. We ſhall, therefore, have 15,504 grains left for the animal matter diſcharged, and the proportion between the ſalts and the animal matter will be nearly as 1 to 100. I found the effect of alcohol upon the diabetic extract to confirm this idea of the proportion of its conſtituents to each other. One drachm of the extract, being kept for ſome time in boiling alcohol, was nearly diſſolved; the reſidue amounting apparently to no more than half a grain.

The preſence of ſaccharine matter in diabetic urine has long been diſtinctly aſcer-

* Annales de Chimie, T. 31. p. 68.

tained,

tained, both from the ſenſible properties of the fluid, and likewiſe from the power which it poſſeſſes of experiencing the vinous fermentation, and of producing the oxalic acid. Until lately, however, phyſiologiſts have been ſatisfied with merely aſcertaining the exiſtence of the ſugar, and they appear never to have inquired, whether it conſtituted the whole or only a part of the reſiduum. The experiments of Mr. Cruickſhank, the earlieſt accurate experiments which were made on the ſubject, at firſt view lead us to conclude, that the extract is entirely compoſed of ſaccharine matter, for he informs us that he obtained as much oxalic acid from a given weight of the extract, as from the ſame quantity of ſugar *. Upon a cloſer examination of his experiments, however, it will appear that he is not warranted in drawing this concluſion from them. He informs us that he was able to procure from an ounce of ſugar a quantity of oxalic acid equal to 4 drachms and 20 grains, whereas it ſeems that, from the ſame weight of diabetic extract, he only obtained three drachms of oxalic acid †.

* Rollo on Diabetes, p. 429. † Ibid. p. 429. 468.

The

The cryſtaline matter which is produced by the action of nitric acid upon the urea, has been deſcribed both by Cruickſhank and Fourcroy; Mr. Cruickſhank makes no mention of the production of this peculiar ſubſtance, upon the application of nitric acid to the diabetic extract; but appears to have conſidered the whole of the cryſtals formed as being oxalic acid. The ſame opinion is more decidedly ſupported by M.M. Nicolas and Guaudeville, who, in their late experiments upon diabetic urine, diſtinctly notice the abſence of this ſubſtance, and point out the want of the urea as one of the diſtinguiſhing characteriſtics of this diſeaſe *. My own experiments, however, have afforded me very different reſults. I mixed a quantity of the dry diabetic extract, with 6 times its weight of a mixture of equal parts of water and nitric acid. It was treated in the manner uſually adopted for obtaining oxalic acid from ſugar, and a quantity of cryſtals were accordingly formed, which at firſt view appeared to be compoſed of this ſubſtance; but in which, upon a cloſer inſpection, beſides the long ſpiculæ of the oxalic

* Annales de Chimie, T. 44. p. 62.

acid,

acid, I discovered a portion of the flat lamellated scales, which are produced from the uréa. By repeating the experiment, and closely watching the progress of the crystallization, I conceived that the oxalic acid was first formed, and afterward the flat scales; and I consequently thought, that by interrupting the process, it might be possible to procure them separate from each other. Accordingly from the same portion of extract, 2 sets of crystals were obtained; in the first nothing but oxalic acid was visible, while the second appeared to be principally composed of the nitrate of urea. The proportion which they bore to each other, was about 6 parts of the oxalic acid to 1 of the latter substance. As the event of this experiment was in direct contradiction to the express assertion of the French chemists, and to the implied result of Mr. Cruickshank, I thought it necessary to repeat it until there could no longer remain any reasonable cause of doubt.

Having ascertained that the urine contained both sugar and urea, I was led to inquire what proportion these substances bore to each other, and whether the total quantity

of

of urea difcharged in diabetes, was greater or lefs than that evacuated in health. As I had not yet been able to difcover any re-agents by which thefe fubftances could be feparately precipitated from the urine, the only means of determining this point was, by afcertaining the refpective quantities of the compounds, formed by their union with the nitric acid. An ounce of fugar, when acted upon by the nitric acid, produces fomewhat more than $\frac{1}{3}$ of its weight of the oxalic acid; the fame quantity of urée, by proper management, affords about $\frac{2}{3}$ of its weight of the lamellated fcales. In order, therefore, that the oxalic acid and the nitrate of urea fhould exift in the proportion of 6 to 1, as in the experiment related above, it would be neceffary that the extract fhould contain about 12 parts of fugar, to one part of urée. Proceeding upon this datum, and eftimating the whole quantity of animal matter difcharged, at 15,504 grains daily, we fhall have 1192 grains for the amount of the urea, within 48 grains exactly double the quantity evacuated in health. It muft, I think, be confidered as fome confirmation of this eftimate, that by a previous calculation,

culation, we had found the different ſaline ſubſtances alſo to exiſt in the ſame proportion.

It ſtill, however, remains to be conſidered, whether we are warranted in drawing a general concluſion from the effect of the nitric acid, upon the diabetic extract now under conſideration. Although, in this particular inſtance, there can be no doubt that it contained urea as well as ſugar, yet we cannot be aſſured that this combination took place in the caſes examined by Mr. Cruickſhank, and the French chemiſts. The determination of this queſtion muſt be left to the deciſion of future experiments. It may, however, be proper to remark, that as the oxalic acid appears to be formed before the nitrate of urea, it is poſſible that the cryſtallization may not have been puſhed far enough in thoſe caſes, where oxalic acid only is ſtated to have been procured. Even where the proceſs is properly conducted, but where there are no particular pains taken to obtain them ſeparate from each other; the quantity of the oxalic acid is ſo much greater, and its peculiar form renders it ſo much more conſpicuous, that the ſcales might be

be very eaſily overlooked by a perſon who did not ſuſpect their preſence. My patient was certainly, in every reſpect, a perfectly fair ſubject for the experiment; the proportion which the ſolid bore to the fluid part in his urine, was as great or greater than in any caſe upon which accurate experiments have been made *, and with reſpect to the extract itſelf, its ſaccharine impregnation was ſo conſiderable as to enable it to cryſtallize ſpontaneouſly; a proof that it exiſted in more than the uſual proportion. Among the caſes detailed in Dr. Rollo's publication, as either ſeen by himſelf, or of which an account is given by his correſpondents, there is only one, viz. that of Mr. Shirreff's, in which the extract could be obtained in the ſolid form; in general, it was only reducible to the ſtate of honey or melaſſes.

* In the caſes of Captain Meredith, and of the General Officer, detailed by Mr. Cruickſhank, the extract left by evaporation, amounted to between $\frac{1}{11}$ and $\frac{1}{12}$ of the weight of the urine employed. M.M. Nicolas and Gueudeville, ſtate the proportion to be $\frac{1}{7}$. In the caſes related by the correſpondents of Mr. Cruickſhank, and by Dr. Home, and Dr. Dobſon, the weight of the urine, before the proceſs, is not given with ſufficient preciſion to enable us to obtain the exact proportion.

The

The peculiarities in this patient's urine may be ſtated as follows;

1. The extractive matter of the urine diſcharged in the 24 hours, was about 31 ounces more than the quantity diſcharged in health, or about 22 times the uſual quantity.

2. The water evacuated during the ſame period, was about 219 ounces more than the ordinary quantity, or about 6 times the quantity in health.

3. About twice as much urea was diſcharged as in health.

4. The urine appeared to contain the ſame ſaline ſubſtances as in health, and in the ſame proportion to each other; but they, as well as the urea, exiſted in about twice the ordinary quantity.

5. About 30 ounces of ſaccharine matter were diſcharged daily.

The ſituation of this patient prevented me from aſcertaining, with any degree of preciſion, the proportion which the urine bore to the ſubſtances received into the ſtomach; but upon the whole I feel ſtrongly inclined to agree with Dr. Lubbock, in ſuppoſing that they

they will be found to correſpond *. It has, no doubt, been frequently obſerved, that the urine has exceeded the liquid part of the diet; but in theſe caſes it muſt be remembered, that the morbid increaſe of the appetite will cauſe an unuſual quantity of food to be taken, a large proportion of which always conſiſts of water. Except the kidney, there is indeed no obvious exit by which the contents of the ſtomach can be evacuated; the perſpiration is checked, the alvine diſcharge is, in general, not increaſed, and the weight of the body is daily diminiſhing.

It has been diſcuſſed whether the ſtomach or the kidney be the primary ſeat of the diſeaſe; if the experiments related above be ſuppoſed to throw any light upon this queſtion, they will tend to prove that both theſe organs are in a morbid ſtate. The exceſſive increaſe of the appetite, accompanied with an apparent defect in the proceſs of chylification, appears to demonſtrate, that ſome diſeaſe exiſts in the digeſtive organs, to which the emaciation may be referred. But we have alſo found that the peculiar matter which is ela-

* Med. and Phyſ. Journ. V. 5. p. 59.

borated by the kidney, is ſecreted in twice its uſual quantity, a circumſtance from which we are induced to conclude, that the action of this organ is very conſiderably increaſed.

Notwithſtanding the aſſertion of Dr. Lubboch *, I think it is eſtabliſhed upon the moſt unexceptionable teſtimony, that the ſaccharine quality of the urine is diminiſhed, or deſtroyed by a total abſtinence from vegetable food. In this caſe it may be preſumed, that the ſugar is no longer formed merely becauſe its component parts are no longer preſented to the ſtomach, not from any real change in the ſtate of the aſſimilation; ſo that we can ſcarcely expect to derive from this practice more than temporary relief. Dr. Lubboch attributes the formation of the ſugar to the want of perſpiration, ſuppoſing that the hydro-carbone, which would otherwiſe be diſcharged by this ſecretion, is converted into ſaccharine matter †; an hypotheſis which the preſent ſtate of our knowledge is not ſufficiently advanced to enable us either to diſprove or confirm. The Engliſh phyſiologiſt will probably feel little inclined to acquieſce in

* Med. and Phyſ. Journ. V. 5. p. 63. † Ib. p. 62.

the notions of MM. Nicolas and Gueudeville, who, after attempting to controvert the doctrines of all preceding writers, conclude, that "Le diabète eſt une conſomption entretenue par la déviation ſpaſmodique et continuelle, des ſucs nutritifs non animaliſés, ſur l'organe urinaire *."

CASE II.

The ſecond caſe was an inſtance of what has been called the diabetes inſipidus, in which there was a conſiderable increaſe in the quantity of urine diſcharged, but where the fluid contained a leſs proportion of ſolid matter than ordinary. The experiments which I had an opportunity of making upon this patient were but few and imperfect, but I conceived that they might not be unintereſting, as they are almoſt the only ones that have been performed upon the urine of this variety of the diſeaſe.

W. H. aged 41, a carter, attributes his diſeaſe to expoſure to wet and cold in following a team, during which time he had indifferent lodging and poor diet; he ſeldom taſted

* Ann. de Chimie, T. 44. p. 46.

any

any animal food, and was in the habit of taking very large quantities of butter-milk. The diſeaſe commenced about 12 years ago; he is unable diſtinctly to remember the particulars of his ſituation at that time, but in general recollects, that he had pain and weakneſs of the loins, a cough, indifferent appetite, thirſt accompanied by heat and dryneſs of the fauces. The increaſed flow of urine was alſo perceived at the ſame time, and about ten years ago, he applied to a rural practitioner, whom he calls a herb-doctor, who pointed out to him its ſaccharine qualities; he ſays it taſted like ſweetened tea. He remained for 12 months under the care of this man, who gave him large quantities of a decoction of different vegetables, a principal ingredient in which he remembers to have been hard-heads, the centaurea nigra of Linnæus. During its uſe the quantity of the urine was diminiſhed and its ſweetneſs deſtroyed, but upon diſcontinuing it, the morbid ſymptoms ſoon returned. Since that time he has had no medical aſſiſtance, and his complaints have remained nearly ſtationary, though upon the whole they are rather increaſed.

The ſymptoms at preſent are, an indifferent appetite, a ſenſation of heat and a gnawing pain at the ſtomach, very great thirſt, occaſional ſickneſs, particularly in the morning. He has a troubleſome cough, attended with a copious expectoration of a tough, whitiſh mucus; in the morning he ſometimes perceives a little mixture of blood in it, and at that time it has generally a ſaltiſh taſte. His teeth are ſeveral of them looſe, and his gums ſore. His ſkin is dry, and he has a ſenſation of ſoreneſs about the body; he ſeldom, if ever, perſpires, and in the night is frequently chilled. He is much diſtreſſed with cramps in the hands, and the lower extremities. He has occaſionally had a pain in the glans penis, attended with ſome degree of difficulty in voiding the urine. The reſpiration appears to be laborious, and he has a degree of huſkineſs in the voice. His ſtrength has been gradually declining, and he is at preſent ſcarcely able to follow any employment. The general appearance is however ſtout, and his complexion ruddy; the pulſe 80, ſtrong and regular.

The urine voided in the 24 hours generally amounted to 6 or 7 quarts. It was of a pale ſtraw colour, ſomewhat opake, and nearly

without ſmell; it ſlightly reddened litmus. After being kept for ſome days it grew more opake, and a ſmall white cruſt was formed at the ſurface, and about the edge of the fluid. It had acquired an unpleaſant, but not putrid ſmell; there appeared to be no tendency to the vinous fermentation. When ſlowly evaporated it left a reſidue of not more than $\frac{1}{50}$ part of its weight, which exhibited a granulated appearance, and exhaled an odor like that of boiled milk or curds. It attracted moiſture from the atmoſphere, and was ſtill acid.

Ex. 1. A few grains of the extract was added to diſtilled water, part of it was diſſolved, but a white powder ſubſided, which was about half the weight of the extract employed.

Ex. 2. A quantity of the extract was added to alcohol, the maſs became nearly white, while the fluid acquired a browniſh tinge, about $\frac{1}{10}$ part only of the maſs was diſſolved.

Ex. 3. The extract was ſpeedily diſſolved by nitric acid, with the diſengagement of nitrous gas; after the addition of ſeveral ſucceſſive portions, the acid acquired a thick conſiſtence and a deep yellow colour.

Ex. 4. A few drops of this nitric ſolution cauſed a precipitate when added to diſtilled water.

Ex. 5. To a mixture of equal parts of diſtilled water and nitric acid an equal weight of the extract was added. A violent action took place, the fluid aſſumed a browniſh colour, but the greateſt part remained undiſſolved. By a gentle evaporation, a browniſh maſs was produced, in which no cryſtalline appearance of any kind was obſerved.

Ex. 6. Equal parts of the aqueous ſolution from No. 1., and the infuſion of galls produced a ſmall quantity of a white, flaky precipitate.

Ex. 7. The aqueous ſolution produced a copious precipitate with the acetite of lead. This precipitate was dried, and then added to 30 times its weight of boiling water, but no perceptible ſolution took place, and a very ſlight cloud only was formed by the addition of potaſh.

Theſe experiments, though in many reſpects imperfect, ſufficiently demonſtrate that this urine differs materially from its natural ſtate. The extract produced by the evaporation of healthy urine amounts to about $\frac{1}{30}$ of its

its weight, and in diabetes it generally exiſts in a much greater proportion, yet in this inſtance the ſolid reſidue compoſed only $\frac{1}{50}$ of the weight of the fluid. From the 1ſt experiment we learn that the phoſphate of lime, which in general forms only an inconſiderable part of the reſidue, in this caſe conſtituted nearly $\frac{1}{2}$ of its whole weight, and from the 2d, we may conclude that the urée which commonly amounts to $\frac{9}{10}$ of the whole reſidue, here formed $\frac{1}{10}$ part only. This deficiency of urée is alſo confirmed by the 5th experiment. By comparing together the 1ſt and 2d experiments, we may conclude that the urine contained the phoſphates of ſoda and ammoniac in conſiderable quantity; and from the 6th, it may be inferred that it poſſeſſed about the uſual proportion of gelatine. From the 7th experiment it would appear that this urine is deficient in the muriate of ſoda, as well as in the urée.

In order to determine whether this urine contained any ſaccharine matter, the nitric ſolution of the 3d experiment was ſlowly evaporated. It was reduced to a browniſh maſs, in which, by the aſſiſtance of a microſcope, cryſtals were diſcovered; ſome of theſe

ſeemed to be of a long, and others of a ſquare ſhape, but in both caſes they were indiſtinctly formed. A quantity of the cryſtals was added to lime water, and a ſlight precipitate conſiſting of a fine white powder was immediately thrown down. After ſome time another precipitate of a flocculent appearance began to be formed, which gradually ſubſided. Neither of theſe appearances were obſerved, when the cryſtals were added to diſtilled water. The brown maſs rapidly attracted the moiſture of the atmoſphere, and was probably in a great meaſure compoſed of nitrate of lime. The firſt precipitate ſeemed evidently to depend upon the oxalic, and the ſecond upon the phoſphoric acid; hence we may conclude that the urine contained a minute quantity of ſugar.

There are ſeveral particulars in this caſe which deſerve attention, more particularly if we might be juſtified in conſidering it as a ſpecimen of the uſual ſtate of diabetes inſipidus. It is obvious that the fluid evacuated was not merely the natural urine diluted, becauſe although there appears to have been a remarkable deficiency of the urée, and probably alſo of the muriate ſalts, the phoſphates were found to exiſt in perhaps a greater pro-

portion

portion than ordinary. This cafe of diabetes differs from the ufual form of the difeafe, in the lofs of appetite which appears to have taken place from its commencement; but the moft remarkable circumftance is the length of time which the difeafe fubfifted, and the fpontaneous removal of the faccharine impregnation from the urine, at the fame time that its quantity was not reduced, and the health of the patient continued gradually to decline. There was in this cafe lefs emaciation than is ufually obferved, which may be afcribed partly to the chronic ftate of the difeafe, but more to the fmall quantity of folid matter, which was carried out of the fyftem by the urinary difcharge.

Liverpool, October 19, 1804.

ARTICLE XXII.

The following circular Letter having been transmitted to the Corresponding Members of the Medical Society, the Answers to the Queries are now published without Alteration or Comment.

SIR, London, May 1803.

The Medical Society of London, of which you are a Corresponding Member, convinced that every medical practitioner will consider the late Epidemical Disorder, commonly termed the Influenza, as an object peculiarly worthy of investigation, and wishing to collect for publication a complete history of the disease, earnestly request your Answer to all or any of the subjoined Questions.

1. Has any Epidemical Disorder appeared in your neighbourhood during the present spring, which differed from the usual diseases of the season?

2. On

2. On what day did it firſt ſhew itſelf?

3. When was it at its greateſt height?

4. When did it diſappear?

5. What were its ſymptoms, particularly the moſt urgent?

6. Did they vary much in different individuals? Were they ſimilar in members of the ſame family, in thoſe of equal age, of ſimilar conſtitutions, and of different ſexes?

7. Has it been fatal when apparently unconnected with other diſ. aſes?

8. What proportion of fatality occurred?

9. What ages, claſſes, or conſtitutions, were moſt obnoxious to the diſeaſe, and felt it moſt ſeverely or fatally?

10. Was the proportion of males or females greateſt?

11. What did you find the beſt mode of treatment?

12. What effects followed bleeding, general or local, emetics, purgatives, opiates, ſudorifics, bliſters, or other remedies; and in what circumſtances were they employed?

13. What was the proper diet?

14. What temperature was the moſt beneficial?

15. What

15. What was the ufual mode of its termination?

16. Were relapfes frequent?

17. Were the fymptoms of relapfes fimilar to the original attack, and were they more or lefs fevere?

18. Did convalefcents recover fpeedily?

19. In what ftate were they left by the difeafe?

20. What was the beft treatment during convalefcence?

21. What were the concomitant diforders which appeared to combine with the epidemic, and were they fevere and fatal?

22. Has the prefent influenza appeared to you to be contagious or not, and on what facts did you ground your opinion?

23. In manufactories, fchools, public inftitutions, and other collections of people, how did it appear, and what was its progrefs?

24. Were a number of perfons frequently affected in the fame houfe, at the fame period, or in fucceffion; and at what intervals?

25. What are the fites, and other local circumftances of the places in which you have made your obfervations?

26. To

26. To what winds are they particularly expoſed?

27. What places in your neighbourhood were affected with the diſeaſe previous to that in which you reſide, and what immediately afterwards; and has the progreſs of the Epidemic in theſe caſes appeared to be in any degree regulated by intercourſe?

28. What meteorological remarks have you made previouſly to the riſe, and during the progreſs and decline of the epidemic?

29. Have you remarked whether the progreſs of the diſeaſe has in any degree followed the direction of the wind; and if this has appeared to be the caſe, can any deviations from ſuch uniformity of progreſs be accounted for from any remarkable intercourſe between different places?

30. Did you ſee any of the former influenzas, and what are the analogies of the preſent with them?

31. Previouſly to, or during the prevalence of the diſeaſe, did you notice any epizoötic complaint?

32. What other remarks have you made on this ſubject, which are not included under the preſent Queries?

The

The Society being desirous to ascertain whether the Epidemic be contagious or not, and to collect such meteorological observations as will throw light on the natural, as well as the medical history of the disease, particularly request your attention to these objects.

They do not mean to limit the answers of their correspondents to their own observations, but will receive with pleasure any information relating to the above questions, which their corresponding members may have procured, and which they conceive authentic and valuable.

Their Lordships the Post-master General, on an application made to them, considering it as a matter interesting to the community, and in the hope of the information obtained proving eventually of benefit to the human race, have, with the utmost liberality, consented, that the correspondence upon the specified objects of the foregoing queries shall be carried on free of expence, provided that the replies to them be sent addressed to the *Medical Society of London*, in letters *not sealed*, under cover to *Francis Freeling, Esq. London.*

It

It follows *of neceſſity*, that the correſpondence to be ſo franked, *muſt be ſtrictly confined* to the ſubject of the queries.

Signed by order of the Society,

Secretary.

Medical Society Houſe,
Bolt Court, Fleet Street.

ARTICLE XXIII.

The following is the Anſwer of Dr. Luke M'Can, of Armagh, in the North of Ireland.

AUGUST 6, 1803.

1. Almoſt every acute diſorder combined with catarrhal affection that appeared in this country ſince January laſt, went by the name of Influenza.

2 and 3. Phyſicians were ſeldom applied to before the diſorder came to its height, it generally commenced as a common cold or catarrh, and was conſidered as ſuch for ſome days, fewer or more, till an additional freſh cold, a wetting, or other cauſe, rendered it more ſerious, and obliged the patient to take to his bed.

4. In ſome ſooner, in others later, according to its degree, the form or variety it aſſumed, the diſeaſe it was combined with, the conſtitution, prediſpoſition of the patient, and the manner it had been treated; in ſome caſes when vigorouſly attacked in its commencement

ment with an active medicine that operated briskly in every direction, *quâ data porta*, it was cut short, and as it were choaked in its cradle, at least as to its febrile symptoms; in some it was a business of some weeks, with the best care; I have heard of some who laboured under it for months past, and still linger under its consequences. It has not left the country yet, June 30.

5. Where it appeared merely as Influenza, the symptoms were a confused uneasiness of the head, heaviness and lassitude of the eyes; the parts about the eyes, and in some the whole countenance swelled with a bloated puffy appearance; a florid ruddy colour, inflammation, and in some ulceration of the internal fauces; generally a relaxation of the uvula; cough, with a sense of, as some expressed it, an uneasy rawness, others a burning heat down the chest. This was the simplest form of the disease; the most urgent symptoms were those that alarmingly affected the head, lungs, and bowels.

6. Varied in different individuals, symptoms were generally of the same species in members of similar constitution of the same family, but

ſometimes of different degrees of ſeverity; the young, plethoric, and robuſt of the male ſex, were the moſt ſeverely affected with thoracic and pneumonic affections; the female ſex with affections of the abdominal viſcera, bilious and obſtinate conſtipations of the bowels, which, if not removed, the ſick became yellow, and died in great diſtreſs.

7. Scarce any died of ſimple catarrhal Influenza, unconnected with ſome other concomitant of the diſeaſe.

8. Very few of thoſe who had timely regular treatment died in this place; I loſt none of thoſe whom I had the timely management of; I was called to ſome in the extremity of a pneumonic affection of the diſeaſe, whom I could not recover. By the report of the clergy of all denominations, in the remote parts of this county, there has been a great fatality in their reſpective congregations; I have been told by a Roman Catholic Prieſt, ten miles diſtant from Armagh, whom I had been called to ſee ill of the diſeaſe, about the latter end of June, that ſcarce a day elapſed, for ſome time previous, without four, five, or more deaths of his congregation; I have had ſimilar reports from

from Proteſtant clergymen, I believe, however, that the greater part of them died without medical aſſiſtance.

9. Individuals of all ages, claſſes, and conſtitutions were obnoxious to it, and individuals of all claſſes and ranks, from the lord and firſt commoner down to the beggar. Lord Enniſkillen, and Thomas Connolly Eſq. are ſaid to have died of it. The young, ſtrong and plethoric, ſuffered moſt from exquiſite pleuriſy and peripneumony; the elderly, plethoric and aſthmatic, from apoplectic and pneumonic affections, both true and ſpurious; the weak, languid, and relaxed from low fevers; the concomitant ſeemed to be connected with the conſtitutional prediſpoſition of the patient, and made its greateſt impreſſion on the moſt irritable and ſuſceptible organ, or part of the ſyſtem.

10. According as they were conſtitutionally prediſpoſed, and expoſed to the exciting cauſe, of married people, I think I have obſerved more huſbands than wives ill of it.

11. I endeavoured to adapt the treatment to the exigency of the ſymptoms; in affections of the head and thorax, when the degree of fever and ſtate of the pulſe indicated, or even

ſeemed to admit it, I bled freely and repeatedly, and always with advantage; the ſtate of the pulſe did not always correſpond with the degree of pain; in thoſe caſes, ſometimes local blood-letting, and ſometimes a bliſter was employed for relief; ſometimes a ſevere pain continued low in the left ſide after blood-letting and bliſtering had been tried; this was imputed to an affection of the ſpleen, congeſtion in the colon, or other viſceral affection, and was moſt effectually relieved by active cathartics; evacuants, and purgatives, were generally continued, and emetics repeated, in ſome caſes, during the courſe of the diſeaſe. In catarrhal caſes, with cough and fever, I employed mucilaginous and nitrous medicines, combined with antimonials; for elderly people, labouring with pulmonary infarction, difficult and ſcant expectoration of tough, viſcid mucus, along with blood-letting and bliſtering, where judged neceſſary, I employed the more acrid expectorants; ammoniac, aſafœtida, ſquills, ſal cornu cervi, ſeneka, &c. in ſuch forms as the patient liked beſt, ſometimes combined with kermes mineral, tartar emetic, or antimonial powder. In congeſtion and conſtipations of the bowels, to which there was a general tendency,

employed

I employed the more active purgatives, extractum catharticum with calomel, which, along with removing constipation, also removed hiccup and yellowness: every variety and concomitant of the disease was connected with bile, and required considerable attention to the state of the bowels.

12. Nearly answered in the preceding; opium was seldom employed, except to mitigate cough after the inflammatory stage of the disorder had been subdued; it answered that intention better with young, than with elderly people labouring under pulmonary infarction, with scant expectoration of tough, viscid mucus.

13. I adopted cooling, diluting, simple diet.

14. That temperature which neither excited cough by its cold, nor increased fever by its heat: 55 of Farenheit might be a proper temperature, but in general it was endeavoured to regulate the temperature by the patient's feelings.

15. Simple Influenza, unconnected with other diseases, sometimes terminated by perspiration, from which the sick in general expressed relief, sometimes in spontaneous diar-

rhœa, but after the feverifh fymptoms vanifhed in that way, a cough, want of appetite, with a bad tafte in the mouth often remained behind, which were removed by an emetic, and fuitable remedies for the cough. When combined with exquifite pleurify, or peripneumony, it required medical affiftance; its réfolution was expedited by blood-letting, general and local bliftering, mucilaginous and acrid expectorants, attenuating, diluting regimen, &c. in cafes of inflammatory pneumonic affection, where adequate blood-letting had not been employed, the difeafe fometimes terminated in vomica, and often in death.

16. Very frequent.

17. Similar, in fome cafes lefs fevere, and required lefs confinement, in fome cafes tardy and obftinate enough.

18. Very flowly, and were long in recovering the ability of their ufual exertions.

19. In a ftate of debility, and inertnefs of the faculties and exertions of both body and mind.

20. A moderately generous regimen, light perfpirable diet, paying due attention to the ftate of the bowels, preventing and removing coftivenefs, guarding againft cold, the hurtful

influence

influence of which convalefcents were very fufceptible.

21. Apoplexy, hemiplegia, paralyfis, at leaft inertnefs of the lower extremities, pleurify, pneumony, both true and fpurious, acute rheumatifm, bilious remittent and low fevers, fometimes with petechiæ, fevere and fatal in many inftances.

22. Many individuals have taken the diforder without any intercourfe with the fick; I have feen fome inftances of one individual in a full family ill of the difeafe, and all the reft efcape; I have known wives fleep with their difordered hufbands without being infected, and hufbands fleep with their fick wives with equal impunity; I cannot fay that any fickened by immediate contagion or intercourfe with the fick, but as they happened to be conftitutionally predifpofed, and incurred, or were expofed to the exciting caufe, which, when clofely inveftigated, could in general be traced up to fome evident caufe, as expofure to cold air, change of bed, or damp bed, laying afide heavy cloaths, and putting lighter, over-heating and getting cold afterwards, fatigue, a wetting, or fome fuch caufe; the hurtful im-

preſſion of cold, however incurred, was the moſt general occaſional cauſe, both of the primary diſeaſe and ſubſequent relapſe. I cannot ſay that human effluvia had any effect in propagating or multiplying the epidemic; many more of the inhabitants of the moſt remote and thinly peopled parts of the country, in proportion to their numbers, were ill of the epidemic, and ſuffered a much greater fatality from it, than the inhabitants of the moſt populous ſtreets, and cloſeſt lanes and alleys.

23. In general, collections of people, who were immured or inacceſſible to the inclemency or viciſſitudes of the weather, eſcaped the diſeaſe better than thoſe who were at large and expoſed to its hurtful influence: the Influenza was not known in the jail or county infirmary of this place.—Of upwards of 400 men of the 18th regiment, who lived in their barracks here for ten months paſt, paraded, meſſed and ſlept promiſcuouſly, but were kept to regular hours, no more than eight of them had the Influenza, while at the ſame time, upwards of ten times that number of the county militia regiment, that was recruiting here for about three months paſt, billetted about the

country,

country, ſtraggling, and expoſed to all weathers, got ill of the diſeaſe; their ſurgeons aſſured me they could not conſider it contagious from intercourſe with the ſick. Children at a ſchool time of life, from ſix or ſeven to twelve or thirteen years of age, in general had the diſeaſe very ſlightly, very few of that age died of it; I have heard of ſome younger children who had a ſore throat with hoarſeneſs, and died ſuddenly of ſuffocation. Of upwards of ſeventy boarders of the Rev. Dr. Carpendale's ſchool here, who all paſſed the day in ſchool together, meſſed and played promiſcuouſly, continued to ſleep in their reſpective dormitories, without any removal or ſeparation, twenty five had the influenza ſo ſlightly as not to require medical aſſiſtance, and all in ſucceſſion. Some at the interval of one, two, and three days, ſome after ten days or a fortnight ſince any had been ill of it. Dr. Carpendale could not obſerve that thoſe who ſlept in beds the moſt contiguous to the ſick, were more diſpoſed to take the diſeaſe, than thoſe who ſlept the moſt remote from them.

After an interval of five weeks ſince either ſchool boy or other individual of Dr. Carpendale's family had the Influenza, one

boy

boy of twelve years of age was taken ill on the 17th of June; he got an emetic and was purged with Ching's lozenges, on the ſuſpicion of worms, without relief, before any medical aid had been applied to. I was called to ſee him on the 19th; he then complained of a cough with difficulty of breathing, ſore throat, a rawneſs down his cheſt, and a ſevere pain in his right ſide, was hot and feveriſh; on inquiring into the cauſe of his illneſs, was told he had got a wetting, and ſat in his wet cloaths to conceal his having been out; he was ordered to loſe ſeven ounces of blood, and if the pain of his ſide ſhould not be relieved by the blood-letting to have a bliſter immediately applied to it, and was put on a laxative ſaline mixture; he ſaid the pain of his ſide and difficulty of breathing were intirely removed by the blood-letting, the laxative mixture brought away nine or ten bilious ſtools. On ſeeing him next day, he told me he had no complaint, but the cough and ſoreneſs down his cheſt, which were ſtill troubleſome to him; they were much relieved by mucilaginous oily mixture with elixir paregoric; he continued a proſperous convaleſcent for two days longer, then got out of bed and would not ſtay behind

his

his brothers, who were going home for the vacation; I heard ſince he had been rather ſlow in his recovery after he got home, but did not take to his bed.

Of ten little girls of the ſame ward, of a female charter ſchool here, who lived, meſſed, and ſat at their reſpective employments together, four had the Influenza, all in ſucceſſion; of two ſiſters one was laid down as the other was getting up; they got but little medicine, ſome phyſic, and antimonial wine that the apothecary of the houſe gave them. In another ward of the ſame charter ſchool, ten of ſixteen took all ill together, but the hair had been cut off them all the day before: the miſtreſs of the ſmaller ward, who had been an ailing ſickly woman, was ſeven days ſeriouſly ill of the diſeaſe; the miſtreſs of the larger ward, who is a ſtrong healthy woman, eſcaped it hitherto.

24. I have ſeen one individual of a full family, and no more, ill of the diſeaſe; have ſeen a parent and two or three children down together, and the other parent keep free of the diſeaſe; they ſickened in ſucceſſion, ſome at one, two, and three days interval, ſome at the interval of a week and longer.

25. The

25. The city of Armagh, lat. 54, 21, long. 6, 36, 30, is built on an elevated ſituation, upwards of 300 feet above the level of the ſea; the country about it is hilly, alſo the boggs and marſhes well drained, and converted into arable ground, meadow, and good paſturage; ſo that dyſentery is never an endemic or local diſeaſe, and intermittents are ſcarcely known now among us.

26. To the S. S. W. N. W. N. and N. E. moſtly ſince the epidemic appeared here.

27. The firſt place I ſaw the diſeaſe was at Tanderagee, about ten miles ſouth-eaſt of Armagh, about the latter end of January 1803. A lady and three of her children got ill of it, they took it in ſucceſſion.

The next place was about a mile due ſouth of Armagh, much about the ſame time, or a very few days afterwards, the huſband and father of a family, having over-heated himſelf at work, and gone to bed as he thought well enough, awoke with a ſevere cough, burning pain down his cheſt, and violent pain in his left ſide, which killed him in a ſhort time. There was no intercourſe between him and the family of Tanderagee. It may be obſerved that the mortality attending the diſeaſe, combined

bined with pain in the left ſide and top of the left ſhoulder, attended with fever and pneumonic affection, impreſſed ſuch deſpair on the minds of many of the common people, that when theſe ſymptoms met in the ſame perſon, he was in many inſtances abandoned to his fate, without any attempt or endeavour for his recovery; but even theſe caſes were got the better of, by an adequate blood-letting, not aſcertained by a limited quantity, or number of ounces, but by bleeding freely without interruption, till there was a remiſſion of pain, and facility of reſpiration.

28. I made no meteorological remarks previous to the epidemic, kept no regiſter of the weather, but recollect the ſummer 1802 was cold and wet, a bad hay harveſt, the beginning of autumn was remarkable for heavy rains and floods, continued ſo till about the 20th of September, the weather then became ſeaſonably temperate, and continued ſo till the latter end of November; the prior half of December was remarkable for long continued rains and great floods; the third week temperate with a mild froſt of three days ſtanding, ſucceeded, during the courſe of the following week, by tempeſtuous windy weather,

with ſevere, heavy, long continued rain, occaſioning as great inundations here, as remembered by any man then living.

1803. January, weather moderate for the ſeaſon, with four days froſt, ſcarce any ſnow.

February, weather rather mild for the ſeaſon, froſt one day, 5th, only a few ſhowers of ſnow on the 18th.—March, weather variable, but tolerable for the ſeaſon, two days hoar froſt, no ſnow.—April, weather the firſt eight days ſhowery wet, and windy; from 8 to 17 remarkably fine warm weather, the wind was due ſouth, the five beſt of thoſe days; from the 17th to the end, the weather was cold and wet, with gales and ſudden guſts of wind, ſhowers of hail, ſleet and ſnow, which was conſpicuous for ſome days on the diſtant mountains; more hail, ſleet and ſnow fell in the laſt fortnight of this month than in the three preceding. The wind was due weſt ſouth-weſt, N. and N. W., during theſe 17 days; the epidemic was more rife and fatal here during this month, May and beginning of June, than any time before or ſince.

May, much rain and high wind for the firſt four days, from 4th to 9th mild ſeaſon-

able

able weather, from 9th to 25th for the moſt part cold, cloudy, diſagreeable weather, from that to the end, mixed moiſt weather, with ſome thunder and lightning. On the 29th June, cold, wet, gloomy, unpleaſant ſummer weather till after the 20th; ſeaſonable good weather from that to the end; diſorder much abated in frequency, though there were ſtill ſome individuals and families ill of it; it now aſſumed more of a typhoid form, and fatal to ſeveral.

29. I believe it came here in a ſouthern direction; heard of its being rife in Cork and Dublin, previous to its coming here; it made its firſt appearance in this county in the latter end of January 1803; the wind was in a S. E. direction the greater part of that month; the epidemic was moſt rife and fatal in the month of April; the prevalent winds then were the S. W. S., W. and S. W., the deviations from that progreſs have not occurred to me, or for want of due attention have eſcaped me.

30. I recollect the Influenza of the latter end of 1775, and beginning of 1776; alſo the Influenza of 1782 and 1800, they were mere catarrhal and pneumonic affections with ſome

ſome degree of fever, but not combined with other diſorders.

31. Not clear in the meaning of the word epizöotic, if it does not imply brute animals; if ſo, I recollect that horſes had a diſorder ſimilar to the Influenza, in the ſpring of 1802, attended with ſevere hard cough, laborious difficult reſpiration, fever and great proſtration of ſtrength; I had two of my own ſo affected, they were plentifully blooded, kept on ſoft maſhes, got a ball compoſed of aloes, ſal polychreſt, extractum glycyrihyzæ aā ℥ſs. calomel, kermes mineral aā ℈i, twice a week, of ℥ſs nitre and grana x of tartar emetic, three times a-day, the days on which the purging ball was not given; it terminated favourably by a plentiful diſcharge by the noſtrils; with ſome it terminated in farcin, and heart ſtrangles, ſo called, and ſome it killed. Calves were very difficultly reared then, and many of them died in the attempt; the bloody murrain prevailed much among horned cattle this ſpring and ſummer, and many of them have died of it, calves alſo die in the rearing.

32. The moſt intereſting remark, if not to the faculty, at leaſt to the community, is that the epidemic has very much abated; ſince the ſummer ſolſtice, it ſeemed to be in ſome meaſure

ſure ſucceeded by the meaſles and ſmall-pox, which, however, were not very general nor of long continuance, they ſeem to have taken their flight along with the Influenza; I have not ſeen or heard of either meaſles or ſmall-pox theſe three weeks paſt; I have ſeen but one ſerious caſe of Influenza during the month of July, it was ſince the meaſles and ſmall-pox made their exit; it is hoped it has now made its exit alſo, not to return again with its late concomitants.

ARTICLE XXIV.

From Dr. ROBERT PERCIVAL, Dublin.

1. None but the influenza.

2. Say month, and I anſwer that in January laſt, caſes occurred like influenza but ſporadically.

3. In the midſt of April.

4. Not altogether yet ceaſed, May 28.

5. Cough, oppreſſion of cheſt, vertigo, pain of back and limbs, pain of face and jaws, noiſe of ears and deafneſs, *extreme weakneſs* and *lowneſs, even fainting*, without ſerious conſequence.

6. Given the conſtitution, &c. ſufficiently ſimilar; varied in individuals.

7. No.

8. Anſwered.

9. Bilious.

10. Equal.

11. Antimonial, ſometimes mercurial evacuants at firſt, thin miſt. camphor. bliſters, expectorants, gentle ſudorifics.

12. Su-

12. Sudorifics were injurious without previous evacuation of primæ viæ.

13. Not too low.

14. Moderate.

15. Imperfect, *i. e.* without crisis.

16. Yes.

17. Yes, but often more severe.

18. No.

19. Weak.

20. Mens hilaris, requies, moderata dieta.

21. Bilious.

22. Contagious, for it travelled from place to place, prevailed in London before it came to Dublin, is now epidemic and violent in some country parts of Ireland.

23. No experience of my own, am told 60 boys (nearly the whole number) at Enniskillen school, were ill at once.

24. Yes, at the same time, so that in some houses the sick were left unattended.

25. Those of Dublin are sufficiently known.

26. Dublin has mountains to the south, but at such a distance as scarcely to shelter it.

27. Answered in part, can say no more from certain information.

28. Winds harſh and dry (N. W. principally) ſince January, no equinoctial ſtorm, little or no rain, no genial ſpring weather till ſince 25th May, when heavy rain began with S. W. wind, a dry and backward ſpring, on the 24th May the leaves of the platanus, walnut, acacia, in a garden one mile to the ſouth of Dublin, almoſt inconſpicuous.

29. Influenza prevailed at Cork before Dublin.

30. Yes in 1782, particularly in London, and ſince in Dublin—weakneſs and lowneſs the moſt characteriſtic ſymptom.

31. Lately dogs have had ſore eyes. I believe generally.

32. None.

ARTICLE XXV.

From Dr. LONGFIELD, of Cork.

JUNE 30, 1803.

We had no prevailing epidemic in this city, or the adjacent country, during the ſpring. On the contrary, the year in general was very healthy, previouſly to the appearance of the Influenza.

By our obſervations the Influenza made its appearance about the 20th of March, was at its height about the 29th April, and diſappeared about the 20th May; ſome few caſes, however, were ſeen in the beginning of June.

It commenced with coldneſs, ſhivering, violent pains in the forehead and acroſs the back and cheſt; extending down the thighs, with a ſenſe of coldneſs along the ſpine, remarkable and unuſual debility, with great reſtleſſneſs, in many the weakneſs was ſo great as to produce fainting; particular and ſtrange confuſion of the head, at times in-

creasing to delirium, defluxion from the eyes and nose with swelling of the palpebræ; very distressing and frequent cough, with little expectoration, some cases, however, occurred in which there was no cough, but a general rheumatic affection; a great tendency to sweating was a frequent symptom. Tongue had a peculiar creamy appearance, urine mostly turbid, and many patients observed an unusual high colour of that secretion, resembling what is observed in affections of the liver. Pulse commonly about 100, but in some it reached 120; in many instances the fever was exceedingly high for two or three days; a pain, referred to the stomach, was in many a very distressing and depressing symptom, as was also an uneasiness in the bowels; about the *fourth* day the febrile symptoms generally abated, but the cough continued to harass much, with loss of appetite, languor and general debility, with great emaciation.

The symptoms were nearly the same in all, differing only in degree and violence, making allowance for constitutional complaints, which were very commonly aggravated to a considerable degree; those who suffered most from

from its attack were ſuch as laboured under pulmonic complaints, and to many of theſe it proved fatal.

The proportion of theſe who died was very ſmall, when unconnected with any other conſtitutional complaint. The old and infirm felt it very ſeverely; as did children at the breaſt, many of whom died. It ſeemed to attack equally males and females.

As to the treatment—*Antimonials*, for the firſt two or three days, were employed with conſiderable benefit in leſſening the feveriſh ſtate, which ſeemed for that period to partake very much of an inflammatory nature; and conſequently did not (as far as our obſervation went) bear opium, a remedy which we have repeatedly found prejudicial in coughs, where there was any tendency to an inflammatory ſtate.—*Bleeding* was in moſt inſtances inadmiſſible, in a very few caſes, however, it was practiſed with advantage.—*Purgatives*, in almoſt all caſes, were of conſiderable ſervice, as there appeared a great diſpoſition to coſtiveneſs. The aq. ammon. acet. was found a uſeful diaphoretic, and camphor has by ſome practitioners been employed uſefully for

quieting the very great reſtleſſneſs attendant on this diſorder.—*Bliſters* we ſeldom experienced much benefit from. A low, diluting *diet* was moſt proper in the firſt ſtage of the Influenza; but towards the decline of the feveriſh period, that of a more nouriſhing kind, with *wine*, was both uſeful and neceſſary, from the great debility that enſued. The moſt ſuitable temperature was that of 63°.—As to its termination nothing critical was obſervable. Relapſes were very frequent, particularly when the weather became cold, which happened from about the 9th April to the 18th, when the thermometer fell to 48°; convaleſcents recovered very ſlowly, and relapſes common on expoſure to cold air.

It appeared to us to be very contagious, as ſome boarding ſchools in the country remained free, until viſited by ſome perſon who brought it from the neighbouring towns; its progreſs was evidently traced from England to Waterford, where it raged before it reached us. Some ſchools which had little or no communication with large towns eſcaped. It did not extend much beyond 25 miles from this city to the ſouth-weſt; in moſt inſtances it

went

went through boarding ſchools and manufactures, but progreſſively and gradually. Three phyſicians who attend the houſe of recovery in this city were almoſt immediately attacked after viſiting a patient ill of this epidemic, in that charity. This city lies very low, and is expoſed to the weſterly winds, which prevail for nearly 9 months in the year. The progreſs of the diſeaſe was evidently marked by intercourſe; the wind was moſtly ſouth-weſt during March, and the thermometer 56°, in April it changed to north-weſt, when the thermometer fell to 48°, at which time the Influenza became moſt violent and general.

The former Influenzas, as far as we remember, were by no means ſo violent, nor attended with ſuch debility and languor.

Many horſes, during the prevalence of this diſorder, were attacked with ophthalmia and cough.

We have every reaſon to believe that this diſorder did not ſpread in the direction of the wind, but according to the intercourſe with different places where it raged at the time.

SIR,

SIR, Cork, June 30, 1803.

You will pleaſe to preſent the above to the Medical Society; and at the ſame time to expreſs our regret at not being able ſooner to comply with their requeſt, on the ſubject of the late epidemic, conveyed through your letter; but as we wiſhed to render our communications more worthy their peruſal, we endeavoured to collect from the practitioners reſident here the reſult of their obſervations; ſuch we have been favoured with, particularly from Drs. Callaman and Barry, but find that the uniform appearance of this epidemic has not allowed theſe gentlemen to give much more than a repetition of our own obſervations. We are, ſir, with much reſpect,

Your very humble ſervants,

JOHN LONGFIELD.
JAMES BENNETT.

ARTICLE XXVI.

From Mr. EVANS, of Roſs, Ireland.

AUGUST 25, 1803.

In anſwer to the queſtions forwarded to me ſome time ſince, I beg leave to inform you that an epidemical diſorder appeared in this neighbourhood during the ſpring, which differed from the uſual catarrhal affections of the ſeaſon, only in as much as it was attended with an unuſual degree of fever, and followed by more than ordinary proſtration of ſtrength.

ARTICLE XXVII.

From Dr. JAMES FLINT, Profeſſor of Medicine.

St. Andrew's, JUNE 6, 1803.

I conſider myſelf to be much honoured by the appointment of the Medical Society of London, to give all the information in my power concerning the epidemical diſorder that is now ſo generally prevalent, named Influenza. The philanthropic motive of the inquiry deſerves much praiſe, and it would give me a moſt ſenſible pleaſure, if the few obſervations I have made could be of any uſe, which I now moſt readily relate.

The Influenza made its appearance in St. Andrew's and its vicinity, about the middle of laſt April, and has not yet ceaſed.

The ſymptoms were a great proſtration of ſtrength, a ſenſation of cold, pains in the legs and back, head-ach, thirſt, faintneſs, and

ſome actually fainted away, and continued cold ſo long as to give concern for the event; the pulſe was quick and ſmall, a total loſs of appetite for food, with vomiting, pain of the ſtomach, ſickneſs and coſtiveneſs, and ſometimes gripes and diarrhæa. They often complained of alternate hot and cold fits, and theſe were ſoon ſucceeded by inflammation of the throat, pains in the breaſt, and difficulty of breathing, and in a few inſtances a pleuritic ſtitch, and hard full pulſe were preſent.

It ſometimes began with a ſpitting of blood and epiſtaxis. It does not appear to me to be contagious, for although whole families were attacked by it, yet a few individuals of many families only ſuffered.

The weather has been very inconſtant, the alternate extremes of cold and heat have been frequent, the wind, during the ſpring, the month of May and firſt week of June, in St. Andrew's, is commonly from the eaſt and north-eaſt. The extremes of heat and cold have been unuſual this ſeaſon.

The Influenza has not been fatal to thoſe who previouſly enjoyed good health, but it has

has carried off ſeveral who were labouring under phthiſis, when it attacked them.

It appears to me to have ſome reſemblance to the Influenza that appeared about 20 years ago, but the ſymptoms are now more ſevere than they were then.

I did not obſerve any epizöotic complaint, either during the prevalence of the epidemic, or previouſly to it.

My treatment of this catarrhal affection was various according to the variety of the indications.

In general I recommended abſtinence from animal food, chicken water and beef tea excepted. The chicken was freed from the ſkin upon account of the oil it contains, and lean beef ſteeped in water half an hour and then that water thrown away, which waſhes off the blood and makes the broth much lighter. Bread in any ſhape was adviſed, and diluting drinks, with a moderate quantity of wine, more or leſs according to the degree of debility.

The ſickneſs was always relieved by a gentle emetic, ſometimes a cupful of ſtrong green tea proved an uſeful and gentle puke.

in

In the caſe of gripes and diarrhæa, mild obtundents, as hydrogala, an infuſion of rad. Althæ and Liq. Rad. Rhæi. and gentle opiates, h. ſ. were uſeful.

I ſeldom employed the lancet, except in the caſes of difficulty of breathing and great pain, when the pulſe was hard and full, and urine very red. In which caſes v. ſ. gave great relief, which, with the appearance of the buffy coat on the blood, ſhewed the propriety of the meaſure. I ſometimes applied leeches to the throat and breaſt, with advantage, when the indications for general bleeding were not ſo obvious.

Frequent immerſion of the feet and hands in tepid water ſuited every caſe. When the patient was very weak, wine and water was given during the immerſion. The promotion of a diaphoreſis was of great uſe, by ſaline draughts, and diluents.

The coſtiveneſs was beſt removed by injections and gentle laxatives, as manna and cremor. tartar.

Bliſters always relieved the pain in the throat and breaſt. I employed them without heſitation, becauſe I ſaw them do great good.

It

It was neceſſary to command the cough by gentle opiates, as the elix. paregoric. of the Pharmac. Edinenſis, ſyr. Diacodii, and Sydenham's tinct. opij. I never ſaw any harm ariſe from opiates, when properly adminiſtered.

The recovery of the convaleſcents was aſſiſted by a more generous diet, to which they gradually returned.

In the way of medicine, tonics, as Pulv. Cinchon. Rubigo ferri mixed with Pulv. Colomb. Tinct. Martis, with gentle exerciſe in the open air when the weather permitted, ſoon reſtored the ſick to their wonted health.

The recovery of one female patient, who loſt a good deal of blood by a hæmorrhage from the noſe, was very ſlow indeed, and gave me great concern for the event.

This made me very cautious in employing the lancet, unleſs when the indications for it were very evident. I am with every good wiſh for the ſucceſs of this laudable undertaking, &c.

ARTICLE XXVIII.

From Dr. JOSHUA DIXON, Whitehaven.

JUNE 17, 1803.

1. During the ſpring months a diſeaſe of a mixed inflammatory and catarrhal nature prevailed; which, from its univerſality, was juſtly ſtiled an Influenza.

2. It was firſt noticed in the month of March. Applications for relief were made at the Diſpenſary upon the 1ſt, but it did not engage the attention of private practitioners before the 13th.

3. It was moſt generally prevalent from the 15th of April to the 1ſt of May.

4. It did not ſubſide gradually, but almoſt immediately diſappeared on or about the 30th of May.

5. The ſymptoms varied in different patients, but the general and moſt powerful were languor and laſſitude, affecting the whole ſyſtem. Coldneſs and ſhivering, which were ſucceeded by conſiderable heat and exceſſive

perſpiration; pains in the limbs and head, and frequent in the ſide or lumbar region; ſlight delirium and urgent irritation to cough, with moderate expectoration. The following ſymptoms ſometimes occurred. Watery diſcharges from the eyes and noſe; a ſenſe of ſoreneſs in the fauces, extending down the trachea, but not attended with inflammation or ulceration. Nauſea and vomiting, with a conſtipated ſtate of bowels; oppreſſive conſtriction at the cheſt. The pulſe was rarely very frequent, though for the moſt part full and tenſe. It always became ſoft, and the ſymptoms were ſenſibly relieved by a profuſe perſpiration. Urine of an high amber colour, depoſiting a copious lateritious ſediment. The dejection of mind could not be accounted for, as the ſymptoms indicated the moſt favourable event. The intermitting nature of this diſeaſe was obſerved in ſeveral inſtances. When the patient ſuppoſed himſelf perfectly well, the ſymptoms would unexpectedly recur with redoubled violence.

6. The appearance of the diſeaſe was conſiderably diverſified in the individuals who ſuffered it. In ſome it aſſumed a purely ca-

tarrhal

tarrhal form, whilſt in others the ſymptoms were thoſe of general fever, with an inflammatory determination to the head. The ſame variety occurred in the members of families, whatever was their age, conſtitution, or ſex.

7. As a ſingle ſolitary diſeaſe it was never known to be fatal in this country. The only apprehenſion of danger aroſe from its exciting the ſymptoms of thoſe diſeaſes and infirmities to which the patient was prediſpoſed; and to this cauſe may be imputed the deaths of ſeveral conſumptive, aſthmatic, aged and debilitated people.

8. Anſwered in No. 7.

9. No age, claſs, or conſtitution was exempt from this diſorder. The inhabitants, however, of high ſituations, and thoſe who had arrived at that period of life in which a tendency to conſumption is obſerved, and whoſe conſtitution had been weakened by previous diſeaſe, were moſt liable to ſuffer its ſevere attack. Low and damp ſituations were, in a great meaſure, free from it.

10. Very uncertain.—The proportion of females was greater than that of males when it firſt appeared, but afterwards *vice verſa.*

11. Almoſt univerſally the beſt, and frequently the only mode of treatment, was that of employing a ſtrict antiphlogiſtic regimen. Plentiful dilution, with mild articles, by promoting a moderate and equable ſtate of perſpiration, not only relieved the preſent ſymptoms, but effectually prevented their future recurrence. The bowels were always kept more than naturally open, and frequently an active purgative was proper.

Upon the firſt attack of the diſeaſe, if the ſymptoms became in the leaſt violent, an emetic was preſcribed: their continuance indicated the uſe of ſaline or antimonial ſudorifics. It was frequently obſerved that James's powder, or any draſtic preparation of antimony, operated very powerfully upon the ſtomach and bowels; hence ſmall dozes of Vin. Antimon. to excite ſlight nauſea and gentle perſpiration, were preferred. Weak wine-whey, or any mucilaginous beverage was alſo drank liberally to promote this latter purpoſe. The irritation to cough was allayed by demulcent pectorals. The painful determination to the head was relieved by bathing the feet and legs in warm water every evening, and applying

plying, at the ſame time, cold vinegar and water to the face and forehead.

12. It never appeared neceſſary to preſcribe either general or topical bleeding. Several judicious practitioners had employed the former with ſome benefit when the local pains were violent, and except the diſeaſe aſſumed a pleuritic form, bliſters have been ſeldom if ever neceſſary. The effects of opiates were always injurious. The operation of emetics, purgatives and mild ſudorifics, as has been already obſerved, was uſeful when the ſymptoms were active.

13. The ſimpleſt food was certainly the moſt proper. The patient was ſometimes indulged with a moderate quantity of wine in the form of whey or negus.

14. The diſeaſe was never ſo powerful as to require any accuracy in adjuſting the temperature of the air in the ſick chamber. A clear circulation of it was always admitted, and in this regard the feelings of the patient were chiefly conſulted.

15. Equable and gentle perſpiration obviated the purely inflammatory ſtate of the diſeaſe, and moderate, eaſy expectoration removed the pectoral ſymptoms.

16. This diſeaſe very rarely recurred in a powerful degree, except from imprudence in the conduct of the patient. Expoſure to cold, or any active exertion when recovering, generally produced this effect. Debilitated conſtitutions ſuffered moſt from this diſeaſe.

17. The ſymptoms of ſuch repeated attacks were not materially different from thoſe of the primary diſeaſe; but were, for the moſt part, much more ſevere; and a conſiderable length of time was required for the perfect recovery of the patient.

18. Excepting under the circumſtances noted at Query 16, or where any conſtitutional infirmity occurred, the convaleſcent ſtate was of ſhort duration.

19. The effects of this diſeaſe were not peculiar. General debility, pain in the head, and irritation to cough, were the moſt remarkable. It was obſerved that convaleſcents were ſometimes liable to ſuffer chronic diſorders.

20. A nutritive diet was directed with wine; and ſimple bitters, as tonics, were the only medicines neceſſary. The bark, in any form, was never beneficial, but always hurtful.

21. No other epidemic prevailed at this period; nor were any diſeaſes combined with it,

it, except the conſtitutional diſeaſes of the patient, or thoſe which were occaſioned by imprudent conduct: and on theſe combinations, its danger principally depended.

22. The difference of opinion which prevails among practitioners as to the nature of this diſeaſe, and the importance of the inquiry, have induced me to collect the facts which can aſſiſt us in arriving at any degree of certainty reſpecting it.

From the cauſes which excited it, the ſituations it firſt occupied, the ſtate of the diſeaſe, and other concomitant circumſtances, I am diſpoſed to conſider it as a purely inflammatory diſeaſe, which has rarely, if ever, been communicated by contagion.

1. Its origin in this country can be aſcribed to no other cauſe than a ſudden tranſition of the atmoſphere, from a remarkable degree of heat and moiſture, to a cold, dry, and windy ſtate.

2. It firſt appeared, and at the ſame time, in lofty or expoſed northern ſituations, and theſe conſiderably diſtant from each other.

3. It has been obſerved that the appearance of purely inflammatory diſeaſes in this country

is almoſt invariably preceded or accompanied by winds from the north or north-eaſt, and that perſons expoſed to theſe winds are moſt liable to ſuffer ſuch diſeaſes. Their origin, therefore, has, with juſtice, been imputed to the prevalence of northerly winds. And as during the continuance of the Influenza the wind was generally from the north, this circumſtance is a ſtrong confirmation of my opinion that the diſeaſe was of a purely inflammatory nature.

4. The mode of its appearance was very uncertain. Sometimes it would inſtantly attack the whole of a family; at others, in irregular ſucceſſion, but from its progreſs we could not ſuſpect its contagious power. Frequently only one was affected, and the reſt of the family, though conſtantly attending the patient, eſcaped the diſeaſe.

5. What forms a ſtriking contraſt between the Influenza and contagious diſeaſes, no prediſpoſition was required for its excitement: and it might have been ſuppoſed, that if it were really of an infectious nature, it would certainly have been communicated to a healthy perſon ſleeping, during the whole courſe of the

the diſeaſe, with one who ſuffered it in the higheſt degree; whereas the contrary has happened in ſeveral inſtances.

6. The ſymptoms which conſtituted the diſeaſe were, in every reſpect, inflammatory, affecting chiefly the head and lungs.

7. The duration of the diſeaſe rarely exceeded 4 days.

8. No tendency to malignant putreſcency ever took place.—

23. The diſeaſe was ſo mild in its ſymptoms, that only 139 have been admitted to the aids of the Diſpenſary. The firſt patients inhabited high ſituations, very remote from each other. Few caſes occurred from the beginning till the middle of March; the diſeaſe then became very general, and continued to prevail till the latter end of May.

24. A conſiderable proportion, and frequently the whole of a large family, have been ſeized with this complaint at the ſame time. In others again its attacks were ſucceſſive, but at no certain interval, and ſometimes only a ſingle inſtance of it has occurred. Vide, No. 22—4.

25. White-

25. Whitehaven, in latitude 54°. 32′, longitude 3°. 30′. weſt, is ſituated remarkably low, yet from its peculiar ſalubrity has been ſtiled the Montpelier of the north. It is ſo contiguous to the ſea that the tide flows up to the town. The ſhore is conſiderably elevated, and the ſoil is dry and ſandy. Its ventilation is promoted by the regular conſtruction of its ſtreets, which are ſpacious, and croſs each other at right angles. It has alſo the additional benefit of being connected with a large valley, which, after a circuit of four miles, communicates with the ſea. It is ſituated in the neighbourhood of extenſive collieries and lime kilns. In the bowels of the earth, coal, lime-ſtone, free-ſtone, ſlate, and iron ore are found in great abundance.

26. Weſterly winds generally prevail in this ſituation; but during the laſt three months, thoſe from the north or north-eaſt have been moſt frequent.

27. The high northern villages in this neighbourhood, diſtant from each other, firſt ſuffered the diſeaſe, and it appeared ſoon after in Whitehaven, but the communication was

too

too rapid and general to juſtify the opinion of its ariſing from intercourſe. The ſouthern ſituations were the laſt to experience this diſeaſe.

28. The influence of the lunar phaſes upon the human conſtitution, in producing, and modifying diſeaſe, has been maintained by many authors; it may, upon this account perhaps, be not improper to remark that at the period (viz. about the 20th of April) when the Influenza raged moſt powerfully, the moon was in Perigee, or neareſt to the earth. Several evenings previouſly to the acceſſion of this diſeaſe ſlight appearances of Aurora Borealis had been obſerved.

Profeſſional and other avocations have prevented me from keeping a regiſter of the ſtate of the barometer and thermometer.

29. It has been noticed at Query 26, that the moſt prevalent winds were from the north, which circumſtance accounts for the firſt appearance of the diſeaſe, in villages ſituated to the north. Intercourſe or connection with the ſick had not any effect in its diffuſion.

30. In comparing the Influenzas which have occurred in my remembrance ſince the

year

year 1760, I can only very briefly obſerve that in their catarrhal nature they were, in many reſpects, ſimilar. The late epidemic was diſtinguiſhed from them by its frequently aſſuming a more purely inflammatory type, unconnected with any pulmonic determination.

31. A diſeaſe called the * Black Quarter has been more than uſually prevalent this ſpring amongſt black cattle, in the neighbourhood of Whiteheaven, and was always fatal. Horſes have alſo ſuffered a ſlight degree of catarrh.

32. Under this head I may notice the diſtinction between catarrh and Influenza. Such is the ſimilarity in the appearance of the ſymptoms which occur in theſe diſeaſes, that under particular circumſtances, it muſt be extremely difficult to diſtinguiſh them. It may, however, be obſerved that, the almoſt univerſal prevalence of the latter, its frequently aſſuming the form of a general fever, with more or leſs of an inflammatory determination to the head, and at the ſame time a perfect

* This incurable diſtemper conſiſts in a powerful inflammation of the lower extremities, which terminates in gangrene. The progreſs of the diſeaſe is very rapid, and young cattle are moſt liable to it.

freedom

freedom from any pulmonic diſeaſe, conſtitute the principal difference. In our late epidemic, the effects of the mode of treatment readily diſcovered the nature of the diſeaſe. Febrifuge medicines relieved and recovered the patient, but oleaginous pectorals ſenſibly aggravated the ſymptoms.

ARTICLE XXIV.

From Dr. COLLINGWOOD, of Sunderland, Durham.

JULY 30, 1803.

Nothing gives me equal pleaſure in this ſtate of mutation as that of communicating any uſeful hint that may elucidate medical ſcience, or be beneficial to my fellow-creature —ſhall briefly anſwer your queries, and occaſionally venture to make a remark with deference to ſo reſpectable and learned a Society —ſhall anſwer the Nos. regularly.

1. An epidemic prevailed here ſimilar to that of autumn 1775, and ſpring 1802, both of which I was extenſively employed for, and ſhall, as far as my memory can help, as my remarks are loſt or miſlaid, lay the outlines before you.

2. About the firſt of May in this neighbourhood, later to the north, and earlier ſouthward, by letters from France, ſouth and weſt of England.

3. and

3. and 4. June 28th. Has not totally diſappeared, but where it prevails is either a relapſe, or in habits having a prediſpoſition to phthiſis, and who ſeem to have that prediſpoſition confirmed by the Influenza.

5. Like all catarrhal affections, the head and breaſt were particularly affected, the patients in general, if they gave a falſe ſtep, bent their head forward or ſideways, imagined, to uſe their own expreſſions, that their brains were like to fall out—Deafneſs and tinnitus aurium were not alike common to all, rheumatic perſons, or that had been previouſly ſubject to intermittents, had a fixed pain in one of the temples, vulgarly called megrim, which, as uſual, put on remittent exacerbations—a ſharp cold rheum or fluid, as clear as rock-water, run from one or both noſtrils, a total want of taſte and ſmell, for upward of three weeks, affected ſome of my patients, quick pulſe, tightneſs acroſs the ſternum, laborious reſpiration, preceded by rigor and all the other leading ſymptoms of pyrexia; theſe in moſt caſes terminated in four days with laſſitude, feebleneſs of the knees, ſtiffneſs of all the joints, and great decay of ſtrength.

6. Catarrhal ſymptoms were ſimilar in all ages, though, according to different conſtitutions, ſome of the ſymptoms were more predominant. Children, previouſly afflicted with the hooping cough, or who ſtill laboured under that diſeaſe, had increaſe of cough, difficulty of breathing, blood iſſued from noſe and mouth, nor are thoſe ſymptoms quite gone; change of air and ſituation, as uſual, has been attended with good effects, though I dare ſeldom recommend cold bathing, as it may be preſumed that ſome of the nobler parts are affected.

7. It is no eaſy matter in practice to meet with an elementary diſeaſe unconnected with other affections. In aſthmatic, rheumatic, phthiſical, &c. affections, it was moſt violent; the deaths in old people moſt numerous.

8. In proportion not many died here, it was more fatal ſouth and north, as I learned from correſpondents.—This town and neighbourhood contains by eſtimation 50,000, out of which 100 fell victims to the diſeaſe.

9. More males died than females, owing to their being more expoſed to the inclemency of

of the weather, and not from any other predifpofition.

11. Young fubjects, many bled at the nofe; bleeding was of fervice, but in others bleeding accelerated that debility to which the difeafe was obnoxious, without relieving the fymptoms.—Pediluvia, pectoral emulfions, &c. and if the pulfe was not too high, emp. calid. fterno was of great benefit; in fome cafes vomits gave temporary relief, by phlegm being emitted; purging in full and coftive habits was falutary, but to others occafioned increafed debility.—Sudorifics, when applied too early in the difeafe, rather confirmed, than removed the fymptoms; but, when properly applied, were of fervice.—Synapifms in great debility raifed the pulfe, and produced a difpofition to perfpiration; but in many cafes haftened the diffolution of the patient.

13. Gruels, fago, flops, mutton broths, beef tea, and wine, in great debility; but in general a difrelifh to all kinds of folids prevailed.

14. The fouth and fouth-eaft wind, dry and exceffive cold at firft prevailed, and latterly

it veered about to the weſt and north-weſt; and as this place lies expoſed to the ſea from the N. E. to S. E. was much expoſed, though large coalfire s, and increaſe of bed-cloths were injoined.

15, 16. It may be matter of diſpute whether ſome colds and catarrhal affections which now prevail, (and which are common when the wind blows from the ſea,) are relapſes of the Influenza, or not, as thoſe that had not the diſeaſe *then*, are now (July 20) labouring under colds, &c. &c. In ſome, the relapſes were more violent than the preceding affection.

21. Rheumatiſm, aſthma, irregular returns of pyrexia, though not properly coming under the character of remittents or intermittents.

22. Some individuals in a family ſay they caught the infection from others of the ſame family, on their return home from a journey; this is rather doubtful, though ſome, little expoſed to the external air, were alſo attacked.

23. We have no manufactories here. Ship-building is carried on to a great

extent,

extent, public ſchools were publicly viſited:—

The other queries are all either comprehended in theſe, or did not come within my obſervation.

I ſhall offer a few remarks on the two preceding Influenzas, viz. that of 1775 and 1782, which, from the extent of my practice, though unaided by notes, gives me confidence in narrating.—About the 7th of October 1775, an epidemic prevailed in the ſhire of Galloway, S. W. of Scotland, which was general over England, Ireland, and alſo ſaid by correſpondents to prevail in North America, &c. it was violent in its attack, though not often fatal in its termination—the ſtate of the air was ſuch that a piece of beef ſuſpended by a paper kite in the air for 20 minutes, became highly putreſcent, as tried in the neighbourhood of Glaſgow, a certain want of elaſticity, continual dark fog, and particular ſmoky ſmell in the atmoſphere prevailed for five weeks, ſun ſeldom ſeen, and though October and November are particularly rainy months in that country, little or no rain fell, wind eaſt ſouth-eaſt and ſouth, ſoft and warm

 —ther-

—thermometer at 56, and 60—persons of all ages were affected, and in one day whole families were confined to their rooms or to bed, so that they had scarcely a nurse left to administer to their assistance.—I think one of 500 died, mostly aged, but the phthisical symptoms of those between 18 and 36 were particularly obstinate; and some have fallen victims to consumption which had its foundation laid in the disease. It will be seen that the state of the weather was very different in this and the subsequent Influenzas, a foggy, dark, warm atmosphere, with heavy dews prevailed, till the 5th of November, when a keen black frost, and strong north-west wind, acted like a charm, and outdid all the doctors, in accelerating a recovery, and obstructing the progress of the disease. In 1782, and the present, the air was generally dry and excessive cold, and the disease disappeared, though no great change took place with respect to the atmosphere.—I omitted saying that persons who died on the 4th, or before the 5th day, turned mottled or spotted very soon after death. If those few remarks contribute to the

increaſe of medical knowledge, or be uſeful, I have my wiſh.

P. S. Moſt of this was wrote a month ago, but I omitted ſending it, as ſome of my patients were labouring under relapſes.

ARTICLE XXX.

From Mr. WAIBLINGER, of Fulneck, near Leeds, Yorkſhire.

JULY 9, 1803.

1. I thought catarrh rather more than uſually prevalent in the circuit of my practice, ſince the latter end of March, but cannot ſay I obſerved any remarkable circumſtance differing from the uſual complaints of the ſeaſon. I had heard of the Influenza being prevalent in Leeds, ſix miles from hence, for ſome time previous, but the latter

2. end of April and beginning of May it has been indeed very prevalent in the circle of my practice.

3. I have not attended ſo many caſes ſince, as I did, throughout the month of May.

4. It has not yet entirely ceaſed in this neighbourhood.

5. The ſymptoms moſt prevalent were, a dull pain in the head and loins, the eyes watery, and naſal diſcharge conſiderable, frequently

quently the throat ſore, in ſome caſes violent pains in the cheſt and ſide, with difficulty of breathing.

6. The variety of the attack in individuals has certainly been conſiderable; in reſpect to its violence, in ſeveral inſtances they have been very ſimilar, in members of the ſame family, but I can draw no general concluſion from that circumſtance.

7. In no caſe has it proved fatal, among ſome hundreds that I have attended, when unconnected with other diſeaſes; and of theſe I only recollect three caſes of elderly people, who had long laboured under aſthma and anaſarcous diſeaſes, for a number of years.

8. Anſwered above.

9. I have not obſerved any particular age more obnoxious to the diſeaſe than another in my practice; perhaps the older claſſes of life may have had it more ſeverely.

10. I think the proportion of the ſexes was nearly equal.

11. Briſk purgatives in the firſt inſtance, and afterwards ſmall doſes of antimony and ſquills, ſo as to cauſe gentle nauſea; if vaſcular action was very conſiderable, I uſually

gave a few drops of the ſaturated tincture of digitalis with each doſe, with the beſt effect; if the cough was troubleſome, I gave a ſmall opiate at night.

12. I ſeldom bled, and when I did it, did not perceive any good effect, though ſometimes ſymptoms ran ſo high, as to apprehend violent pulmonic inflammation; yet I ſeldom found any buff on the craſſimentum, or relief enſuing from bleeding. Bliſters were, I think, occaſionally uſeful. The latter part of the queſtion, as to the circumſtances where they were employed, it would be too voluminous to enter into, and is, I think, partly anſwered above.

13. Diet ſtrictly *antiphlogiſtic*. I uſually ordered the patient to dilute freely with ground-ivy tea, ſweetened with honey, or coarſe ſugar; if it did no good, it was I believe innocent, and a ſort of *placebo* which might be uſeful.

14. The temperature of the rooms was directed to be comfortably cool.

15. If taken early, in nine caſes out of ten, by uſing the above remedies, the ſymptoms went off completely in a few days.

In

In many inſtances, however, leaving great debility, for which it was neceſſary, and obviouſly uſeful, to preſcribe the cortex, unleſs forbid by ſome other conſideration.

16. Relapſes were frequent.

17. I think in general the ſymptoms were nearly ſimilar, but moſtly more ſevere.

18, 19, 20 and 21. Anſwered above.

22. I have not completely made up my mind on this ſubject.

23. In two large ſchools that I attend, the epidemic has been ſo very various in preciſely the ſame

24. circumſtances, and the intervals ſo very different, that I can give no deciſive opinion.

25 and 26. The ſites and local circumſtances of the places in which I made my obſervations, are ſo extremely various, that I cannot directly anſwer this queſtion. I do not, however, recollect any particular difference.

27. The diſeaſe made its appearance in Leeds, ſix miles eaſt from here, 6 weeks or 2 months before we had any thing of it.

To the remaining queries, I have nothing particular to ſay.

ARTICLE XXXI.

From Dr. BERTRAM, Hull.

JUNE, 9, 1802.

In anſwer to your letter of the 16th ult. which I only received on the 4th inſtant, conveying ſome queries from the Medical Society of London, reſpecting the late epidemical diſorder, I have to ſay, that it will afford me much pleaſure, to be able to add any thing to the ſtock of facts, with which you will be furniſhed by your numerous correſpondents, and ſhall therefore reply to the queſtions propoſed in the order in which they are ſtated, premiſing, however, that although my anſwers may not be ſo explicit, yet I ſhall not make any remarks, unwarranted by my own obſervation, or that of others, on whoſe fidelity and accuracy I can rely.

1. An epidemical diſorder has been very frequent, differing from the uſual diſeaſes of the ſeaſon, which, although very general, has not

not influenced every individual, as many have escaped it entirely, and others have been so slightly affected, that, had there not been any particular complaint prevalent, would have passed off without any observation.

2. About the 20th of March.

3. About the 10th of April.

4. About the end of April, unless in cases of relapses, when the period must of course be uncertain; for although rheumatic cases were very frequent in April and May, and by many included under the reigning epidemic, yet I think they were perfectly distinct disorders, and clearly occasioned by the season.

5. The most general symptoms were catarrhal, nearly resembling those described by Dr. R. Pearson, the most troublesome and unmanageable of which was the head-ach, and when the muscles of the neck were also affected, which was often the case, every motion of the head, especially the rotatory one, was very distressing and painful. Some had violent and sudden attacks of vomiting and purging, nearly resembling cholera morbus, though the evacuations did not indicate so

much

much error in the biliary fecretion, either in quantity or quality, yet the bowels were, in the majority of catarrhal cafes, coftive. Others again had confiderable affections of the fauces, conftituting the Cynanche Tonfillaris, which, however, moft commonly terminated in reforption.

Although it may appear objectionable to include thofe three feemingly diftinct diforders under one name, yet I do it from a firm conviction of their being different types of the fame diforder, and occafioned by the fame caufe, as I cannot trace that more than one of the above train of fymptoms exifted in the fame perfon, either at the fame time, or in fucceffion, during the whole prevalence of the epidemic.

6. Except in the variety above ftated (5), or influenced by any particular predifpofition or previous diforder, the fymptoms were nearly fimilar.

7. Not fatal, except in very old perfons.

8. Uncertain, but the fatality was extremely rare.

9. Not fatisfactorily afcertained, but where it proved fatal, it feemed to do fo from acting as the occafional caufe, rather than by exciting the tendency

tendency to a fatal termination, previoufly lurking in the habit, efpecially in cafes of phthifis pulmonalis, diftinctly and rapidly accelerating the tragical event.

10. No decifive refult from inquiries upon this head.

11. In thofe affuming the catarrhal form, full or naufeating dofes of antimonic tartar, then aperients and gentle diaphoretics. For the head-achs, topical bleeding, blifters, anodyne fomentations, and the warm bath; as although opiates procured relief, they certainly aggravated the pain, after the narcotic effect had ceafed, and in full dofes, feemed to have a hurtful tendency in every fpecies of the diforder; and the affection of the head, in many cafes, appeared to baffle every effort of fkill for a confiderable length of time; although aperients, which, from the ftate of the bowels, were in thefe cafes ftrongly indicated, feemed to produce moft permanent relief.

In that variety of the diforder refembling cholera, a fimilar treatment to that which is found ufeful in the latter difeafe, was fuccefsful.

12. Al-

12. Although, general bleeding in thoſe caſes where an inflammatory diatheſis exiſted, or where a tendency to it appeared, certainly produced relief, yet as thoſe inſtances were very rare, and it evidently increaſed the ſubſequent debility, it was ſeldom had recourſe to.

13. Low diet, diluting tepid drinks, no fermented liquor.

14. Unleſs in very urgent caſes, confinement in bed was not neceſſary, though owing to the cold weather, it was found adviſeable to keep within doors.

15. Without any remarkable increaſed ſecretion, but that of the kidneys, which, in many caſes during the diſorder, was very much diminiſhed.

16. Although not frequent, by no means uncommon.

17. Symptoms ſimilar to thoſe moſt urgent during the preceding diſorder, and often as ſevere.

18. In ſome very ſlowly.

19. A very great and diſtreſſing languor and liſtleſſneſs was in many caſes the ſequel, eſpecially when a relapſe occurred, and ſeemed

to

to be a kind of intermediate link betwixt the two diſorders, thereby making it difficult to aſcertain when the former ceaſed, or the latter began its courſe.

20. Food eaſy of digeſtion, and ſuch as in ſmall bulk afforded much nouriſhment, gentle exerciſe, change of air, bitters, aſſiſted ſometimes by the tepid bath.

21. Anſwered before, although rheumatic caſes were very frequent.

22. Doubtful, although I rather am inclined to think, that it is not contagious, as individuals in families frequently eſcaped, and where they were all affected, the attacks did not ſeem to obſerve that regular ſucceſſion which takes place in diſorders ariſing from contagion.

23. There are no extenſive manufactories, in this town or neighbourhood, and in the largeſt ſchool, out of near eighty day ſcholars, about 14 only were affected, although they were not only expoſed to the diſorder at ſchool, but in their different families, and intercourſe with their numerous collateral acquaintances; and in the ſame ſchool, out of thirty-ſeven, the number of which the family reſiding

reſiding in the houſe is compoſed, only ſix were attacked, which latter number is excluſive of the former; and in all, the diſorder was ſo mild, as not to require the aid of a phyſician, which ſtatement will corroborate my opinion advanced in the 22d anſwer.

24. Anſwered above.

25. Hull is ſituated in a flat country, about 12 miles from the German Ocean, on the banks of a ſmall river, which empties itſelf immediately into the Humber, two miles broad, and about 20 miles from its mouth.

26. Northerly and eaſterly, eſpecially during the vernal months, and the latter are particularly ſevere from the vicinity of the ſea, there being no intervening high ground, or other ſhelter to ſcreen from its ſharp and piercing nature.

27. It appeared to ſhape its courſe from ſouth to north, and not to be regulated by intercourſe.

28. Some very warm weather for a few days towards the end of March, which was preceded and ſucceeded by cold eaſterly winds, and dry weather.

29. The

29. The progreſs of the diſeaſe has not in any degree ſeemed to follow the direction of the wind.

30. In 1782. the Influenza did not reach Berwick, where I then reſided, until the ſeaſon was farther advanced, and the weather was very warm; but having no memoranda, I cannot ſpeak decidedly on its peculiar nature, but I recollect that it did not appear to me to be contagious. From many circumſtances, but chiefly from the ſurgeon of the Wiltſhire militia, then in barracks there, who conſulted me on the moſt proper mode of treatment, informing me, that it did not affect the men by rooms, meſſes, or companies, but promiſcuouſly, and I remember his mentioning that many of them had pulmonic hemorrhages, and others were ſuddenly ſeized on the parade, after falling as in a ſyncope; and that bleeding, though ſtrongly indicated, eſpecially as the men were for the moſt part robuſt, proved hurtful.

31. None ſo general as to be obſerved, during many months preceding or during the prevalence of the diſorder.

32. None but what are included in the above anſwer.

 If

If any of my remarks appear unſatisfactory, I ſhall be happy to explain them farther, or to render any other ſervice to the Medical Society.

I have a daughter at a ſchool at Leeds, who was taken ill, in the beginning of April, and who having ſuffered a relapſe, is now not quite recovered; ſhe had very mild catarrhal ſymptoms, chiefly head-ach and fever, and much debility.

ARTICLE XXXII.

From Mr. CHARLES ELLIS, Hull, Yorkſhire.

AUGUST, 6, 1803.

Our having had the Influenza here particularly mild, when compared with the ravages it has committed in other places, may in ſome meaſure account for its not having ſufficiently attracted the attention, as to enable me to anſwer all your queſtions; regretting it is not in my power to give you a more ſatisfactory account of it, and one more worthy your attention, I tranſmit to you the few obſervations I made during its prevalence. It firſt appeared here about the latter end of February, and kept increaſing until about the middle of April, when it began to decline; and ſince the 24th of May I have not had one patient attacked with it.

The uſual ſymptoms were chillineſs, rigors, pain in the head, back, and limbs, nauſea, languor, and debility. The tongue, at the

firſt white, but before the end of the diſeaſe it became browner, particularly in the middle; in ſome an acrid diſcharge from the noſe and eyes, which gave them an appearance not unlike that which they have in the meaſles; the pulſe quick, ſoft, and weak; a tickling cough coming on about the third day, and gradually became more violent, with pain in the breaſt, dyſpnœa, and a quantity of phlegm and mucus was expectorated. In this manner, with little variation, were thoſe who had the diſeaſe in its worſt form affected, who were under my care. In ſome it was ſo ſlight as not to confine the patient a ſingle day, which has occurred in the ſame family, with others, who had it in a much ſeverer manner. There ſeemed to be no exceptions to it, either in age, ſex, or conſtitution. Upon the whole I had rather more female than male patients. I attended about 120, but in no inſtance was it fatal; neither have I heard of its having been ſo, with any of my medical friends. Emetics, the ſaline julep with gentle aperients, when coſtiveneſs indicated their utility, with bliſters upon the breaſt and ſides, when the pain in either was conſiderable, and the antiphlogiſtic regi-

men were the means I generally purſued for the firſt three or four days. When the inflammatory ſymptoms began to diminiſh, and the cough, which was always the moſt troubleſome part of the diſeaſe, and the manner in which it univerſally terminated, came on, the lac. amygd. with tinct. opii camph. or when there was much difficulty in expectoration, occaſionally giving the lac. ammon. and ox. ſcillit. generally ſucceeded in abating it. I met with only three relapſes, which appeared to proceed from the patients having imprudently expoſed themſelves to cold; the inflammatory ſymptoms and pain in the breaſt in one of them were worſe than upon its firſt attack, but in the other two, conſiderably ſlighter. I had no caſe where bleeding was neceſſary. How far it is contagious I cannot decide; in ſome caſes it has appeared clearly ſo, in others not ſo. I have met with it where at firſt only one perſon has been attacked with it, and it afterwards went through the whole family, in others where but one in a family had it, and where the others were equally expoſed to infection as in the other caſes. It more generally happened, however, that where it began

in a family, every member of it was affected more or leſs. The country around us is particularly flat, and the town itſelf nearly ſurrounded with water. The diſeaſe has appeared to come from the ſouth, and proceeded north; we heard of the inhabitants of Lincoln and different parts of Lincolnſhire being affected with it, previous to its being prevalent here.

ARTICLE XXXIII.

From Mr. CROWTHER, of Halifax.

AUGUST 7, 1803.

According to your requeſt, I ſhall here endeavour to give you ſome account of the firſt caſe that came under my care in the late prevailing Influenza, to which I ſhall ſubjoin ſome remarks ſince made; but had I been previouſly aware of this requeſt, it is probable that my account had been more complete and ſatisfactory.

The firſt caſe, then, that fell under my care was on the 8th of February laſt. A man about 40 years of age, of ſlender make, and apparently of a conſumptive habit, was ſeized in the night with ſickneſs, and difficult breathing, together with an excruciating headache, profuſe ſweating, quick pulſe, a furred tongue, and a violent cough.—In the morning I was ſent for, and found him as above

 deſcribed.

defcribed.—I took from him 12 ounces of blood, gave him a cathartic, compofed of decoction of fenna, fal nitre and fyrup fcill. two table-fpoonfuls, to be taken every two hours, until it operated, and at night a tea-fpoonful of the paregoric elixir, with an addition of tinct. opii, in a little water. On the 10th, found him much better, his fever abated, his cough fomething lefs, but inclined to vomit. I then gave him a gentle vomit of ipeca. which got up a large quantity of phlegm, and relieved his head very much; but did not quite remove his vomiting. On the 12th, gave him a faline mixture in a fermentive ftate, which put a ftop to his vomiting, but brought on his cough more fevere; fo that he complained of a ficknefs in his breaft, and great heat. I ordered him mutton-broths, and calves' feet jellies, and fuch like mucilaginous fupport, taking every other day a little of his purging mixture, as he found occafion. He then gradually recovered, only his cough continued till after he returned to his bufinefs. Recent experience has convinced me that to ftop the cough in this complaint is almoft deftroying the patient. Re-

fpecting

ſpecting its height, it varied much in different conſtitutions. In perſons of a weak habit, it was difficult to determine the preciſe time; the robuſt and ſtrong in about eight or ten days. The diſorder diſappeared as the weather became warmer, but its influence is yet felt in many aſthmatic conſtitutions, and thoſe were the perſons that have ſuffered moſt from it, and to which the diſeaſe has been moſt fatal. I cannot ſay the diſeaſe has been fatal when unconnected with other complaints. Old perſons whoſe conſtitutions were broken with infirmities have been carried off by this diſorder. The diſorder has not been confined to either ſex in particular.

Relapſes were very frequently more ſevere, and with aged perſons generally fatal in a ſhort time.

The diſorder generally affected the whole family in ſucceſſion.

Upon inquiry I find that where the inhabitants reſide under hills, ſheltered from the eaſt winds, they have eſcaped more generally, unleſs in ſome families where there is every reaſon to believe the diſeaſe was brought from another quarter; and on the other hand,

hand, with perſons reſiding on hills and expoſed to all winds, the diſeaſe has been very prevalent and troubleſome.

Such, Sir, is the account my memory enables me to give you, and hoping your candour will excuſe its imperfections, as I was not previouſly aware of your requeſt.

ARTICLE XXXIV.

From Mr. JEFFERSON, Pontefract.

JULY, 2, 1803.

Anſwers to queries.

1. Certainly, but milder in its effects, and not near ſo general in its attacks, as in other parts of the kingdom, as will appear by the following conciſe replies.

2. About the middle of January, and at firſt did not diſtinguiſh it from rheumatic fever.

4. I think I ſaw ſome ſlight caſes having relation to it, ſo late as the middle of June.

5. Pain in the loins, and breaſt, the latter I believe was altogether muſcular; judging ſo from the good effect of bliſters.

6. Where ſeveral perſons of the ſame family were affected, it was indiſcriminately milder, or otherwiſe, ſome were confined to their beds for three or four days, while others continued to follow their daily occupations.

7. Not

7. Not in this town or neighbourhood.

9. Old people with aſthmas, or any other diſorder of the cheſt. Of this deſcription a few died.

10. If any difference, ſhould take it to be the females.

11. Keeping up a diaphrocris with volatile alkali, camphor, &c. where plethora more prevailed, nitre was uſeful.

12. Did not bleed, found no great advantage in emetics,—when purgatives were wanted, thought calomel intitled to a preference. Seldom had reaſon to be pleaſed with the effects of opiates; ſudorifics always beneficial; bliſters never failed to produce all the good effects that could be deſired.

13. Broth, gruel, pudding, &c.

14. Warm.

15. By perſpiration.

17. When relapſes did occur, (which was not frequent) the ſymptoms were ſimilar to the original attack.

18. Conſidering the ſhortneſs of the diſeaſe, convaleſcents were left in ſuch a ſtate of extreme debility, that their recovery was always ſlow.

20. Animal

20. Animal food, wine, porter, &c. &c.

22 and 23. Have no reafon to think the Influenza highly contagious, if at all fo; within four miles of this place, there is a pottery confifting of upwards of three hundred fouls, they have daily intercourfe with the town, and every other part of the country, yet not a fingle perfon of them has fuffered from the difeafe.

25 and 26. Pontefract is a dry and elevated fituation, our prevailing winds in the fpring are generally from the eaft, this year it feldom blew from that quarter, being chiefly confined (with the variation of a few points) to the N. W.

27. We heard of the epidemic, both north and fouth, often before it appeared.

ARTICLE XXXV.

From Mr. JONATHAN BINNS.

Ackworth School, Nov. 11, 1803.

Though I may be able to communicate nothing, which may be deemed of much importance, on the ſubject of your circular letter, as total ſilence may be conſtrued into diſreſpect for a reſpectable ſociety, of which I have many years had the honour to be a member, I am deſirous of contributing my mite towards your laudable intention.

What I have to relate will, I truſt, throw ſome light on the queſtion, whether the Influenza is, or is not, a contagious diſeaſe. My facts are of the negative kind, for I did not ſee a ſingle caſe of the late epidemic; this I conjecture aroſe from the ſcarlatina anginoſa being prevalent at the time in this family, which ſpread ſuch an alarm in this neighbourhood as to cut off almoſt all communica-

munication, and from my having declined *vifiting*, fince I fettled here.

If the Influenza arofe from the general ftate of the atmofphere, there is reafon to fuppofe it muft have been very general in this fchool, as there are few fimilar inftitutions in the ifland in which the air is ordinarily more freely admitted than in this, and during the prevalence of the fcarlatina there was a more than ordinary attention to it; not only the fchool rooms and dining-rooms, but even the dormitories had, in general, the windows partly open both night and day; and in play hours the children are much out of doors, when the weather is not very unfavourable. At the time that the fcarlatina exifted here, the Influenza prevailed in the neighbouring towns, and I am informed by my friend Dr. Richardfon, that it was very general at Wakefield, which lies only eight miles weft of us, while the wind blew almoft conftantly from that quarter for feveral weeks; we muft, therefore, have been expofed to the fame kind of air, that the inhabitants of that town were, during that time, yet the Influenza did not attack a fingle individual of this family,

family, which, when the ſcarlatina broke out, conſiſted of 298 children, and about 35 officers and ſervants. Dr. R. further informs me, that the ſingular fact of 300 having eſcaped the diſeaſe at Ackworth ſchool, urged him to inquire if a ſimilar circumſtance happened at any other ſchool; he adds, "I went to Crofton *, where there are about 60 young ladies, and was informed by Mrs. Wilſon that they all had eſcaped the Influenza. The diſeaſe attacked many families in the village of Crofton. The young ladies are pretty conſtantly in the open air, but had no communication with the people of the village."

I think it not probable that the Influenza was counteracted with us by the prevalence of the ſcarlatina, as there was always a conſiderable number of the family free from it, though 170 had it in the courſe of four months; beſides the ſick, for the moſt part, were removed to a houſe at a diſtance; nor do I ſuppoſe that the fumigations we uſed,

* Crofton is a village about four miles eaſt of Wakefield, and therefore with a weſt wind, more immediately receives the air which blows from that town or neighbourhood.

which

which were inſufficient to ſtop the progreſs of the ſcarlatina, could have prevented the Influenza; at Crofton ſchool, I believe, nothing was done, only care taken to prevent communication with the infected; hence I think it reaſonable to conclude, that the late Influenza did not depend merely on the general ſtate of the air, but rather on contagion.

I hope my having been more than ordinarily engaged in attention to the ſcarlatina in this family, will be ſome apology for the lateneſs of this communication.

ARTICLE XXXVI.

From Dr. OAKLY, of Mirfield, near Huddersfield.

JUNE 1, 1803.

GENTLEMEN,

Having for ſome years retired from the practice of phyſic, I can offer little in anſwer to your queries, from my own obſervation. However, I put your letter into the hands of Mr. Carr, an elderly gentleman, reſiding at Gommerſall, three miles from this place, which ſituation is hereafter deſcribed. He is a man of a good natural underſtanding, cultivated by a good education and judicious reading; and in extenſive practice, as a ſurgeon and apothecary. I will here ſet down his anſwers to ſeveral of your queſtions, according to the numbers in the printed letter, to ſave writing and circumlocution.

1. Yes: a diſeaſe much like a common cold, and at firſt miſtaken for it, till becoming very pre-

prevalent, it diſcovered itſelf to be an epidemical Influenza.

2. *

3. About the end of May.

4.

5. Laſſitude; pain of the head and back; ſoreneſs about the cheſt, with troubleſome cough; laborious reſpiration and pyrexia.

6. The ſymptoms are nearly the ſame in all patients.

7. No.

8.

9. It is more frequent in adults than children.

10.

11. Emetics, bleeding, bliſters, nitrous aperients, mucilaginous pectorals.

12. Opiates were uſed very ſparingly, and ſudorifics but little. Bleeding and bliſters were indicated by the urgency of the pain, and other ſymptoms of the cheſt.

13. Antiphlogiſtic.

* When nothing is added to the number, Mr. Carr would not venture a decided anſwer for want of certainty; or the queſtion is virtually anſwered, or made to require no anſwer by that to ſome other query.

14. Moderate cold.

15.

16.

17.

18. No, rather ſlowly.

19. In a ſtate of conſiderable weakneſs.

20. The ſtate of convaleſcence ſeemed to require no particular treatment.

21. No ſuch have appeared here.

22. Not contagious; as many inſtances have occurred of individuals in large families being attacked, while the reſt remained free.

23. Schools ſeem to have eſcaped. Nothing particular has occurred in regard to manufactories.

24. Few caſes of this have occurred.

25. Gomerſall, a village lying high in a hilly, cloth-manufacturing neighbourhood, about 8 miles from Leeds, Wakefield, Huddersfield and Halifax, and 6 from Bradford.

26. Chiefly weſterly.

27. We heard of the Influenza being in London and Bath before we ſaw any thing of it here: then it ſhewed itſelf at Leeds, from which place it came to us, probably by intercourſe.

28. The

28. The ſpring has been fine, but rather droughty.

29. The wind ſeems to have had no influence on the progreſs of the diſorder.

30. Yes: that which prevailed about 20 years ago, was very ſimilar in every reſpect.

31. No.

32. None.

ARTICLE XXXVII.

From SAMUEL ARGENT BARDSLEY, M.D.
Phyfician to the Manchefter Infirmary.

1. An epidemic catarrhal fever, or Influenza, appeared in Manchefter as early as the firft week in February; but it extended itfelf, for fome weeks, in only a partial and confined degree; I met, however, with no inftance of the difeafe, in either public or private practice, prior to the beginning of March; many other practitioners likewife affign this latter date as the period of its commencement; yet, I am able to ftate, on the unqueftionable authority of my friend, Dr. Percival, that the difeafe manifefted itfelf, in his own family, on the 4th of February; and from the beft of his recollection, it occurred, in feveral cafes, during the early part of that month. It does not, however, appear to have fpread throughout all parts of the town, until the fecond week of March.

2. Anfwered above.

3. I find

3. I find it exerted its greateſt influence between the 26th of March, and the 2d of April: this is evident from the number of patients, entered into the home-patient-book of the Infirmary, having exceeded in a fourfold proportion, that of any other week ſince the commencement of the year.

4. It diſappeared about the 26th of April.

5. The epidemic, in its genuine form, exhibited the following ſymptoms: ſpontaneous wearineſs and languor, ſucceeded by ſlight ſhiverings, with alternate fluſhings of heat, firſt attack the patient; he then complains of a deep-ſeated pain in the courſe of the frontal ſinuſes, accompanied, for the moſt part, with ſneezing, and a profuſe diſcharge of lymph from the noſe and eyes. In the ſpace of a few hours, acute darting pains in the muſcles ſubſervient to reſpiration, attended with a tickling cough and hoarſeneſs, frequently occur—as the diſeaſe advances, the patient complains of much anxiety about the præcordia, dull, aking pains in the back and knee-joints, and of great debility, languor, and depreſſion of ſpirits. The pulſe is ſmall and quick; ſeldom, if ever, hard and full; the

tongue is covered with an extremely white mucus, and has the appearance of having been ſuffuſed with milk—the tongue being moiſt, little or no complaint is made of thirſt. —The appetite is not only entirely loſt, but a fixed loathing to any ſolid food is expreſſed —on the 3d day, and ſometimes as late as the 4th, the diſeaſe ſeems to have attained its acme.

6. The above deſcription is only intended to apply to the genuine unmixed form of the epidemic. Modified by age, ſex, and temperament, and (admitting it to be contagious) by the circumſtances under which contagion was communicated, it exhibited a remarkable diverſity in its effects, upon different ſubjects; yet in every caſe ſome degree of reſemblance might be obſerved. Its diſtinctive character was never completely loſt. In moſt delicate females, either ſickneſs or diarrhæa, with tranſient ſhiverings and debility, unaccompanied with any catarrhal affection, formed the prominent ſymptoms of the diſeaſe.

In ſome the mucus membrane was but ſlightly inflamed; in others great pain and difficulty of breathing, with a ſenſe of rawneſs

and ſoreneſs in the trachea and cheſt, indicated more extenſive inflammation. Members of the ſame family were differently afflicted—ſome were ſolely affected with the almoſt pathognomonic ſymptoms of intenſe pain in the head, and general debility; others chiefly ſuffered from the catarrhal affection, attended with unuſual languor, and derangement of the ſtomach and bowels.

7. I have not met with a ſingle inſtance of its fatality, when unaccompanied with other diſeaſes.

8. I cannot aſcertain the proportion from my own experience; but I believe that notwithſtanding its univerſality in this crowded and populous town, few have fallen victims to its ſeverity. If I might hazard a conjecture, not more than one in two hundred have died of the genuine epidemic.

9. Female ſervants were peculiarly liable to this diſeaſe; heads of families, and very young children form a comparative exception to its indiſcriminate attack; but thoſe who were moſt obnoxious to the complaint, and felt it moſt fatally and ſeverely, were old, aſthmatic, or otherwiſe debilitated ſubjects.

It

It would appear that puerperal women were highly predifpofed to, and fatally afflicted, with this malady. One intelligent midwife loft five patients within ten days: and one puerperal patient died of the epidemic in our lying-in-hofpital. This is fo important a fact, and fhews the neceffity of ftrict feclufion, from the rifk of perfonal infection, in all puerperal cafes, that it cannot be too generally promulgated.

10. The proportion of males exceeded that of the females, in thofe cafes which were admitted into the Houfe of Recovery; but, I believe, the majority was on the fide of the females, if the flighteft poffible inftances of the difeafe are to be taken into the account.

11. The medical treatment admitted of confiderable variety; yet from its prevailing character of debility, the chief attention was directed to moderate the febrile fymptoms, and to fupport the powers of life.

12 and 13. Emetics were found highly beneficial on the firft attack; indeed the frequent occurrence of fpontaneous naufea and ficknefs pointed out their ufe. To cleanfe the primæ viæ, moderate dofes of calomel, with

with rhubarb and antimonial powders combined, were given, and repeated occaſionally, with excellent effects. When much pain and ſoreneſs in the head and breaſt were felt, attended with a hot and dry ſkin, either pediluvia, or fomentations of the legs and feet with flannels wrung out of hot water, ſenſibly relieved the patient, by exciting a gentle moiſture on the ſkin. To moderate the febrile ſymptoms, ſmall doſes of antimonial wine, combined with ſpir. æther. nitros. and aq. ammon. acetat. were almoſt invariably employed.

The local affection of the breaſt was in general ſubdued by the application of bliſters; and even when the pain in the cheſt was ſevere and deep-ſeated, attended with impeded reſpiration and a teazing cough, this remedy ſcarcely ever failed in affording ſpeedy relief. If an excruciating pain and confuſion of the head, turgidity in the veſſels of the eyes, and great impatience of light, indicated a more than uſual determination of the blood to the brain; bleeding with leeches at the temples, and bliſtering the forehead and nape of the neck, were ſucceſsfully put in practice.

Opiates

Opiates were ſeldom employed during the firſt ſtage of the diſorder, as they had a tendency to exaſperate the complaints of the head and cheſt, and increaſe reſtleſſneſs and feveriſh heat. When the cough was inceſſant, and ſharp wandering pains affected the breaſt and muſcles ſubſervient to reſpiration, attended with a rapid and ſomewhat hard pulſe, the addition, in ſmall doſes, of the tincture of digitalis to the ſaline and diaphoretic medicines, already mentioned, not only mitigated the cough, but likewiſe promoted expectoration, and induced ſleep. Oily medicines were neither uſeful, nor much reliſhed by the ſick.

The lancet was very ſeldom employed; in only two inſtances, it was deemed neceſſary to uſe general bleeding; and even topical depletion of the veſſels was rarely adviſable. To ſubdue the obſtinate cough and copious expectoration of aged people, and thoſe afflicted with aſthma, and other pulmonic complaints, ſmall combined doſes of opium, digitalis and calomel, along with bark and other tonics, were generally employed. Tonic bitters, with the mineral acids, proved uſeful in checking

checking profuſe diſcharges by the ſkin or lungs, and contributed likewiſe powerfully to reſtore the general health.

Wine, in gruel or whey, formed a powerful auxiliary in ſupporting the ſtrength, and preſerving a moderate and equable moiſture on the ſkin. It was found neceſſary, among the infirmary patients, to counteract febrile debility, after due evacuations of the ſtomach and inteſtines, by a light nutritious diet, and a moderate uſe of wine.

14. The patients were kept in a moderate degree of temperature. The wards were duly ventilated, and any exceſs of heat or cold carefully guarded againſt. The patient was ordered to be kept in bed with a moderately ſlight covering; and his head and ſhoulders were conſiderably raiſed, until the giddineſs and general debility were partly removed. He was then permitted to get out of bed, and only invited to lie down occaſionally with his clothes on. But ſo great was the proſtration of ſtrength, in ſome caſes (eſpecially of females) that ſudden faintings enſued upon attempting to remove them from an horizontal poſture.

Some-

Sometimes on the 3d, but more frequently on the 5th day, the feverish symptoms abated; yet great languor, and a cough more or less severe, but with freer expectoration, continued to molest the patient. A copious deposition in the urine, with a change from rather a pale and limpid hue, to a more natural colour, on the 4th or 5th day, denoted the diminution of the febrile symptoms. Moderate and easy perspiration, with copious, and somewhat bilious stools, greatly favoured the speedy termination of the more urgent symptoms of fever and pains in the back, head, and limbs.

16 and 17. Relapses do not appear to have been frequent. I have met with but few who suffered a repetition of the worst symptoms; and in these instances, the disease degenerated into typhus, and was with difficulty subdued.

18 and 19. The worst cases were discharged cured from the House of Recovery, in about an average period of 12 days; but many delicate persons, subject to pulmonary affections, lingered for weeks, under general debility, and a harassing cough.

20. See

20. See the method. medendi, number 12 and 13.

21. The epidemic ſeemed to be moſt frequently complicated with peripneumonia notha; and, in a very few inſtances, with peripneumon. vera. It occaſionally aſſumed the appearance of Cynanche Tonſillaris; and ſometimes degenerated into typhus. In old people the peripneumonic ſymptoms proved fatal. Four or five of the oldeſt inhabitants of the Poor-houſe (the youngeſt of them having paſſed 80) died of ſimple peripneumony.

22, 23, and 24. That the Influenza is a contagious diſeaſe, ariſing from a ſpecific materies morbi, and readily communicable from one perſon to another, is rendered probable from various facts, as well as from its analogy to other contagious diſorders. Its appearance here, although rapid, was progreſſive. It ſpread, like other infectious maladies, more particularly among thoſe expoſed, by their greater intercourſe with each other, to the danger of contagion. Female domeſtics, and the inhabitants of the nurſery, ſeldom eſcaped its influence. A gentleman of this town returned

turned from London, in the 3d week of May, while labouring under Influenza. He found his family, in the country, all well; and unconſcious of the infectious nature of his complaint, he beſtowed the uſual careſſes upon his children. Three of them ſickened the next day, and two more on that following. The nurſes of the Houſe of Recovery fell ſick, ſoon after the reception of the firſt caſes of the malady, notwithſtanding the uſual preventive rules againſt infection were ſtrictly followed. At Rochdale, I have been aſſured, the origin of the diſeaſe was diſtinctly traced to ſome gentlemen, who had brought it from Lancaſter, where they had attended at the aſſizes. But the moſt complete and ſatisfactory evidence of the propagation of this diſeaſe by contagion, (I had almoſt ſaid the only mode by which it is communicated,) is derived from what happened in the Mancheſter lunatic-hoſpital. None of the patients were afflicted with the epidemic, (although permitted to walk out daily in the airing grounds,) until the keeper and matron became affected. In conſequence of their attention, while labouring under the Influenza, to ſome elderly patients,

patients, whoſe ſituation demanded more than common care, they communicated the infection to five of the perſons thus circumſtanced, while all the reſt, to the amount of 80 and upwards, entirely eſcaped the complaint.— The houſe-ſervants, who are ſolely engaged in domeſtic employments, and are never permitted to aſſociate with the lunatics, ſuffered, more or leſs ſeverely, by the diſorder. Thus it would appear, that a careful excluſion from infected perſons, is probably the moſt certain preventive method of obviating a malady ſo univerſally prevalent.

The appearance of the epidemic in manufactories and ſchools, was rapid, but progreſſive.

In children the ſymptoms, after expoſure to contagion, appeared rather earlier than in adults.

In my own family four adults were ſucceſſively attacked, after an interval, between each ſeizure, of two days.

25 and 26. The local circumſtances of Mancheſter render it by no means an unhealthy ſituation. Its climate, though unplea-

 ſant,

ſant, is not inſalubrious.—It is ſituated in the middle of a large plain, ſurrounded on the eaſt and north by a chain of mountains; and open on the weſt to the Iriſh Channel.

This ſituation expoſes it to frequent rains; as the hills which form its line of ſeparation from Yorkſhire, arreſt the clouds in their progreſs from the Atlantic Ocean. The annual quantity of rain which falls, at a medium, may be eſtimated at 33 inches. The moſt prevalent winds are from the ſouth-weſt and north-eaſt. The inhabitants, from their mode of living, are remarkably exempt from inflammatory affections; and catarrhal fever is by no means of common occurrence. Typhus, under all its varieties, is the great ſcourge of the maſs of the lower orders of the people.

27. I have not been able to procure ſatisfactory information upon this head; but as far as my inquiries have gone, Mancheſter would ſeem to have been the centre, from whence the epidemic extended itſelf on all ſides.—The great intercourſe between this town and all the neighbourhood, no doubt contributed to its ſubſequent ſpread from the

former

former to the latter. The regular march of the epidemic has unqueſtionably been from ſouth to north. When arrived here, however, it ſeemed to diverge, with tolerable equality, to all ſides of the county.

28 and 29. It does not appear to have followed the direction of the wind; or, to have been, in the leaſt, influenced in its progreſs by any ſenſible variation, either in the direction or temperature of the atmoſphere. No ſeaſon has been apparently leſs unfriendly to the human conſtitution than the whole of the late winter and early ſpring, in this part of the kingdom. This will appear from the following ſummary ſtatement of the weather, ſince the year commenced.

January, till the 10th, mild and cloudy

February, from Jan. 10 to Feb. 12. uniform froſt, without much intenſion or remiſſion. Moſtly fine and clear, with little ſnow.

After the 12th, ſhowery weather, with gleams to the end of the month.

March, for 2 days heavy rain; from this to the middle of the month, froſty nights, but mild days, with little ſnow or rain; the

reſt of the month rather warm for the ſeaſon, and little rain.

April, till the 17th uncommonly fine and warm for the ſeaſon, remarkably drying winds.

The barometer has been no way uncommon during the ſeaſon; the winds have been principally north-eaſt and ſouth-weſt, as uſual.

30. I cannot ſpeak from my own experience to this point.

31. I have not been able to aſcertain whether any epizootic complaint prevailed, either previouſly to, or during the prevalence of the diſeaſe. At leaſt, none fell under my own obſervation; nor that of others, of whom I made inquiry.

32. I ſhall take the liberty of concluding this paper with a few deſultory obſervations. Much diverſity of opinion has prevailed concerning the nature and eſſential character of the diſeaſe. From my own obſervation of its prevailing ſymptoms in this place, I am diſpoſed to conſider it eſſentially a contagious febrile diſeaſe. The mucous membrane may be more or leſs diſeaſed, and even active local

inflammation may occasionally prevail; but the former is not necessarily attended with general excitement; and the latter is only to be considered as an anomalous symptom dependant on peculiarity of constitution, or some other accidental circumstance. Great mischief will arise from confounding its occasional varieties with the permanent and specific character of the disease. Thus we learn from Sennertus *, that in the epidemic catarrh of 1580 incalculable injury ensued, from partially considering the local affection of the throat and breast, as indicating a disease of a purely inflammatory kind. He mentions the "Tussis sicca, dolor pectoris, et præcipue septi transversi faucium asperitas, ventriculi languor, tandem gravis anhelitus," &c. as symptoms which induced many practitioners to make free use of the lancet, and with such mortal effects, that in the city of Rome alone, where bleeding was promiscuously employed, more than 2000 persons perished. Indeed, it may be laid down, as a medical axiom, that the constitutions of the

* De Feb. lib. iv. cap. xviii.

generality of the inhabitants of populous and manufacturing towns, will not admit of debilitating remedies, in the ſame degree as may ſafely be put in practice among more temperate and more robuſt claſſes of people.

Mancheſter, June 11, 1803.

ARTICLE XXXVIII.

From Mr. WILLIAM KNIPE, of Garſtang.

1. Amongſt the uſual diſeaſes of the ſpring, this town and neighbourhood was attacked by an epidemic, ſimilar in appearance to *catarrhus a contagione.*

2. The firſt appearance of the complaint was about the firſt of April.

3. From the diſorder being in different ſubjects, variouſly modified, the criſis was ſeldom regular; however, from my obſervations, the diſeaſe was generally at its acmè on the 5th or 6th day; when under a mild form, about the third or fourth day.

4. The complaint ſubſided about the latter part of May.

5. The moſt prominent ſymptoms were a ſenſe of ſhivering, the patients complained of moſt violent head-ach, general aching in the back and limbs. The eyes appeared inflamed, the cough was from the beginning, dry and trouble-

troublesome, accompanied with soreness in the chest, tongue furred, thirst urgent, pulse frequent, yet not particularly inflammatory; the respiration difficult, in many instances the internal fauces were much inflamed and enlarged, attended with hoarseness.

6. The symptoms were in general regular and uniform, yet in some individuals, they were so mild as scarcely to require confinement.

7. In no instance has any case in this neighbourhood proved fatal, unconnected with other disorders.

8. In my practice only one fatal case happened during the complaint; the patient was a young lady about fourteen, who had previously been much afflicted with pain in the head, she was on the third or fourth day seized with an epileptic fit, accompanied with dilated pupil, and every concomitant symptom of compressed brain, and died the day following.

9. The subjects most severely handled by the disorder were the old and puny; those who had formerly been subject to asthma, or pneumonic inflammation, or whose peculiarity

rity of conſtitutions, gave them a liability to pulmonary conſumption.

10. As remedial agents, antimonials, given in the firſt ſtage, ſo as to induce gentle vomiting, occaſional aperients, ſudorifics, pectoral and expectorant demulcents; when difficult reſpiration occurred, with tightneſs in the cheſt, venæſection and bliſters to the breaſt, were had recourſe to. This plan ſeemed moſt advantageous.

11. The moſt proper diet conſiſted in a ſtrict attention to the antiphlogiſtic regimen.

12. Its common termination was by a gentle diaphoreſis; in conſumptive habits, the diſorder frequently produced hæmoptyſis, and purulent expectoration, accompanied with hectic fever.

13. The patients always felt moſt comfortable in a middling temperature. And the ſymptoms ſeemed exaggerated either from too warm, or too cold a room.

14. Several convaleſcents, through too early an expoſure to cold, had relapſes; the ſymptoms were much more ſevere than the firſt attack, and their recovery much retarded.

15. When

15. When in a ſtate of recovery the patients complained of moſt violent head-ach; a frequent troubleſome cough, and hoarſeneſs; a ſenſe of weakneſs in the lower extremities, with general debility, in conſequence of which, they frequently fell victims to the intermittent fever.

16. The ſtate of the country during the epidemic was extremely unhealthy. The ſcarlatina anginoſa, rubeola, pertuſſis, were all uncommonly prevalent, they were, however, in few inſtances, fatal.

17. Without entering into any opinion, reſpecting the nature or ſource of contagion, ſhall merely ſay, I have no doubt but the Influenza was highly infectious.

18. In the different manufactories, the diſorder was very predominant; whole families were viſited by it, yet upon inquiry, found them attacked in ſucceſſion, this in my opinion affords a ſtriking proof of its being infectious; the intervals between the attack were various.

19. The wind during the firſt and ſecond week of February, was almoſt confined to the north and north-weſt, ſometimes, however,

it

it ſeemed to blow, for the courſe of a ſingle day, from every quarter, during the latter part of the month ſouth-weſt and north-weſt.

In the early part of March the wind was chiefly ſouth-weſt and north-eaſt, in the latter part ſouth-weſt and north-weſt.

During the early part of April the wind was various, yet much from north and ſouth-weſt; in the latter part of the month, chiefly from weſt and north-weſt.

20. Prior to the Influenza appearing here, I was informed that an epidemic was prevailing in Kendal and Lancaſter, alſo that the town and neighbourhood of Liverpool ſuffered from a ſimilar diſorder.

21. You wiſh to be informed if any epizootic complaint prevailed here. I perfectly recollect that in the month of February laſt, a very fatal epidemic was predominant amongſt the ſwine; in our town and neighbourhood, whole herds were ſwept off by it.

Theſe are the only remarks I have to make upon the ſubject, they are, however, taken from practical facts. And ſhould they be found of the ſmalleſt advantage, I ſhall think myſelf ſufficiently rewarded.

July 2, 1803.

ARTICLE XXXIX.

From THOMAS HULL, M. D. Retford, Nottinghamſhire.

In ſtrict compliance with the requeſt, contained in the printed queries iſſued by the Medical Society, for the purpoſe of more clearly aſcertaining the nature of the diſeaſe, which has ſo widely and univerſally pervaded every part of the United Kingdom, indiſtinctively termed the *Influenza*, I feel myſelf called upon, as well in compliment, as in duty, to the public, to tranſmit you the following replies, which I preſume you will conſider as nearly confined to the ſubject of the propoſed queries, as the nature of them will admit.

The diſeaſe, now *irrevocably* denominated Influenza, made its appearance in this part of the county, about the 20th of March 1803, at which time, the atmoſphere was ſubjected to great and ſudden viciſſitudes, attended by ſevere morning froſts, and ſharp weſterly winds.

winds. It evidently differed much from the ufual difeafes of the feafon; and was fo novel in its appearance, as to require fome ingenuity in adapting to it an appropriate name. As far as my notes and memorandums can inform me, the difeafe appeared to be, not only the moft univerfal, but the moft fevere in its attack, about the middle of April, and from that time, gradually declining, left us about the end of the month of May.

Though pretty uniform as to the leading fymptoms, its mode of attack varied confiderably in fome points, depending chiefly, if not altogether, on the difference in age, conftitution, and temperament, of the perfons affected.—Its commencement was ufhered in, in the ufual way, with alternations of heat and chillinefs, attended by head-ach, ficknefs, a tickling and diftreffing cough, with fhooting pains in the cheft, back, and loins, the pulfe but flighly accelerated, of natural ftrength and foftnefs; a flight tendency to coftivenefs; with a white furred tongue. In the courfe of three or four days, all thefe fymptoms gradually fubfided, excepting the cough and pain in the cheft, which generally remained obfti-

nate

nate for many days, and ſometimes weeks, afterwards—the languor and exceſſive debility, with depreſſion of ſpirits, a loathing of all kinds of food, with a decided objection to almoſt all kinds of exerciſe, formed the latter ſtage of the diſeaſe; which in duration and extent varied conſiderably in different individuals. Towards the cloſe of the diſeaſe it evidently aſſumed (in many inſtances although not in all) an intermittent type, at which time the cough gradually abated, the expectoration became more free, and the ſputa more conſiſtent; ſuch was the general appearance of the diſeaſe, as it occurred in my practice, nor were the modifications ſo very numerous, as have been repreſented in other parts of the ſame county; in ſome inſtances, a hardneſs and ſwelling in the tonſils, and ſublingual glands, attended by pain and difficult deglutition, was obſerved, and in a few inſtances, a ſmart attack of pneumonic or peripneumonic inflammation, which, however, was eaſily removed by the application of a bliſter. Allow me in this place, to obſerve what appeared to me ſo very extraordinary, as it occurred in ſo many inſtances, under the ſame general

type,

type, and confequently fhewing the identity of the difeafe, in every fubject affected with it; notwithftanding the exceffive languor and debility, with the moft unhappy depreffion of fpirits, that fucceeded the firft ftage of the complaint, fcarcely any perceptible *difference in the ftate of the pulfe* could be obferved. Inftead of finding, as we fhould have naturally expected, an equal depreffion and finking of the pulfe, when every other fymptom marked the excefs of debility, the pulfations remained *ftrong* and *powerful*, not eafily compreffed, nor yet fo full as to create any fufpicion of internal inflammation.

This peculiarity of pulfe was obfervable in and about Newark, to a confiderable extent, and, in feveral inftances in, and immediately in the neighbourhood of this town, where the complaint was attended with much feverity.

When feveral members of the fame family were affected at the fame time with the difeafe, I could not difcover any material deviation from the common mode of attack, excepting in thofe inftances, where fuch a deviation may be afcribed to the difference

in

in the age and conſtitution of the perſons attacked.

I have never witneſſed a ſingle inſtance of the complaint proving fatal, when unconnected with *other* diſeaſes; nor, with the exception of three or four caſes, has it been attended by any degree of fatality, within the ſphere of my practice, or that of my medical neighbours.

Perſons advanced in years, worn out in conſtitution, and ſhattered by previous diſeaſe, not only ſuffered the *moſt ſeverely*, but proved the *only* martyrs to its attack. Females compriſed by far the greater number of patients under my care.

The mode of treatment I univerſally purſued in the diſeaſe, was much the ſame as I employ in all caſes of incipient fever; the uſe of emetics, and antimonial diaphoretics, which, independent of their ſpecific effects, have generally the power of opening the bowels to a ſufficient extent, I always had recourſe to, in the firſt ſtage of the complaint; and theſe ſeldom failed to remove the ſymptoms of general fever.

Draughts

Draughts compoſed of aq. ammon. acetat. miſtur. camph. and vin. antimon. were always productive of much benefit; I ſeldom had occaſion to employ either *general* or *local* bleeding: by way of relieving the cough, and dyſpnœa, I had recourſe to the application of a bliſter, and draughts compoſed of miſt. camph. ether. vitriolic. and t. caſtor. taken three times in the day, which for this purpoſe appeared to me by far the moſt beneficial.

The diſtreſſing ſymptoms of the *ſecond* ſtage, I found in many inſtances, much more difficult of removal.—*Bark*, in all its forms, ſeemed, in many caſes, not only of no advantage, but oftentimes prejudicial: the bowels were thrown into inordinate action, and the languor and debility much increaſed, by the too powerful purgings, occaſioned by its uſe; in this ſtage, I experienced nothing more beneficial, than a due perſeverance in the following draught.

R. Infuſ. Cort. Caſcarill. ℥vi.
Miſtur. Camphorat. ℥ſs.
T. Rhei ſpirituoſ. ʒi.
Acid. Vitriol. dilut. gt. vj. M. fiat hauſtus, ter die ſumendus.

 A light,

A light, eaſy, and ſufficiently nutritive diet, was at all times of great uſe; while a full, ſtrong, and rich diet, ſeemed rather to retard, than haſten a cure.

Relapſes in this part of the county, were very common; though in general, not exceeding, in ſeverity or duration, the primary attack.

The recovery from convaleſcence was, in general, very expeditious; yet in thoſe, who did recover *ſo very* expeditiouſly, I think I could diſcover a proportionate propenſity to a relapſe.

The diſorders which appeared to combine with the epidemic, were the febris pneumonica of Hoffman II. 136, and the peripneumonia notha of Sydenham, Sect. 6. Cap. 4. the former of which required a ſtrict attendance to the antiphlogiſtic ſyſtem, while the latter was always relieved by the uſe of bliſters, preparations of ſquill. opium, and colomel given in ſmall doſes.

In anſwer to your 22d query, I ſhall briefly give you my *decided opinion* that the Influenza, or the diſeaſe ſo called, *was contagious* in this country. The facts on which I have grounded

grounded my opinion, were obſerved by me with much care, and were furniſhed by my own practice. The general prevalence of the diſeaſe; the identity of it, in every inſtance where it has affected branches of families, correſponding in age, conſtitution and temperament; the ſlight deviations from the regular mode of aggreſſion, as well as in its progreſs, even in perſons advanced in life, and of different conſtitutions; its having run through particular families, without allowing a ſingle individual to eſcape; and its ready communication from one family to another, where but little intercourſe exiſted, point out to me ſome of the ſtrongeſt facts in favour of the opinion I have ſo decidedly maintained.—It would be occupying more ſpace, than the extent of my paper would admit of, were I to make any comments on the above: I ſhall therefore leave it for the preſent.

The town, as well as the country about Retford, is certainly to be conſidered as one of the moſt healthy in the kingdom. It is ſituated about 144 miles on the high road from London to York, contains, with the connected pariſhes of Weſt Retford and Clarbro',

bro', about 3000 inhabitants; its atmosſphere is not loaded, or corrupted by any noxious effluvia from marſhes, fens, or manufactories; it ſtands expoſed to the weſt, to an extenſive plain of about 25 miles, part of which, now incloſed, formerly occupied a conſiderable ſhare of Sherwood Foreſt; and the river Idle paſſes nearly through the center; it ſtands the moſt expoſed to the north and weſt winds.

The town of Retford, is ſituated north of Newark on Trent, 20 miles, and ſouth of Doncaſter 18 miles.

The epidemic appeared in and about Newark, *three weeks*, before we had the ſlighteſt experience of it; and paſſing by us, in ſome direction or other, Doncaſter was affected with it, near a fortnight before us; now this appears to me a circumſtance not eaſily to be accounted for, as the general courſe of the epidemic was from the ſouth: this, however is a circumſtance, which I have ſeveral times before noticed, in the caſe of other contagious epidemics, particularly the *ſcarlatina* and *ſmall-pox*: whether it be confined to diſeaſes, *purely* contagious, or not, I have not been able to

 aſcertain,

aſcertain, yet it appears to me entitled to ſome conſideration; for if we are to conſider the introduction of theſe three diſtinct complaints into this neighbourhood, attended by *ſimilar* circumſtances, evidently not depending entirely on the courſe of the winds; why are we not intitled to conſider them as connected in ſome other reſpects, analogous at leaſt, ſo far as relates to the pecularities in their origin, propagation, and extent?

Retford, July 1803.

ARTICLE XL.

From Mr. BISHOP, of Leicefter.

JULY 15, 1803.

Query.

1. A peculiar catarrhal epidemic appeared in this town and neighbourhood, during the laft fpring.

2. Between the 15th and 20th of February.

3. About the 10th of April.

4. About the 25th of May.

5. The moft urgent effects of the difeafe confifted in difturbance of the vital functions; refpiration was for the moft part confiderably impeded, accompanied with a good deal of pyrexia.

7. Thofe only died under the immediate influence of the difeafe, who had ufually been fubject to winter cough.

8. Of

8. Of thoſe whom I ſaw, not above one in about 26 died, as ſpecified in the reply to query 7.—Theſe were perſons beyond their meridian.

9. Thoſe who had previouſly been ſubject to frequent inflammatory attacks upon the lungs ſuffered moſt ſeverely; the aged of thoſe who periſhed, died of perip. notha.

Many in early life, (chiefly between 20 and 40 years), were much haraſſed with a dry, painful cough, together with a good deal of conſtriction about the præcordia, and general inflammation; in ſeveral hæmoptoe enſued, inducing a rapid phthiſis.—Where the diſeaſe was very urgent the patient generally complained of acute head-ach, and was occaſionally, eſpecially during the night, ſomewhat delirious; at other times, in a few inſtances, a certain degree of ſtupor took place. I ſaw but very few under the age of 16 who had the diſeaſe.

10. Of the caſes to which I was called full four-fifths were females.

11. Several of the aged patients complained long and ſeverely of acute fugitive pains in the intercoſtal, pectoral, and abdominal

 muſcles:

mufcles: in a few the feat of fimilar pains was referred to the liver, attended with uneafinefs at the fummit of the fhoulder or clavicle.—Several had fevere pains in the mufcular parts of the limbs. Many were very apt to be irregular in their bowels, being at one time laxative, at another conftipated. In the young and phlogiftic habit the diforder betrayed marks more or lefs characteriftic of thoracic inflammation; numbers of whom probably fuffered extenfive adhefions of the pleura, judging from the feat and fixity of the pains.

Thofe who appeared to labour under phlegmonic inflammation of the cheft, in whom recourfe was had to *general blood-letting* in the firft inftance, pulfe being hard, frequent and oppreffed, the evacuation was of confiderable advantage, in relieving the cheft, and abating the hardnefs of the pulfe. In one example of this defcription, in a plethoric woman, aged 45, there was fo much pain on one fide of the breaft, accompanied with hard, hoarfe, dry cough, accelerated and difficult refpiration, hard, frequent but ftrong pulfe, that I took away ℥xij. of blood from the

the arm, by which the acute pain was much relieved, as well as the dyſpnœa, and the patient recovered well with the aid of bliſters, expectorants and pediluvium; but the evacuation undoubtedly lowered this patient much more than it had wont to do on former occaſions. The blood here was covered by a pretty thick cruſt, which was a good deal cupped, the coagulum firm and tough. Another female, aged 46—ſubject to frequent pneumonic attacks, during the progreſs of the Influenza was ſeized with ſevere pleuritic affection, inceſſant cough, without expectoration, pulſe very hard, about 90.—The patient averſe to topical bleeding, I took from the arm ℥vj. of blood, in the firſt week of the diſeaſe.—The blood was very ſizy; ſhe had a better night after this evacuation, and appeared to be much more comfortable the next morning;—the ſame ſymptoms recurring, with unabated ſeverity, in leſs than 24 hours afterwards, I repeated the evacuation of blood to the ſame quantity as before. The moſt urgent ſymptoms were again relieved, and on giving the ſquill and ammoniacal gum, together with a bliſter to the cheſt, copious expec-

expectoration enſued; and I had flattered myſelf that my patient would have recovered: but, unwilling longer to adhere to ſimple diluents, and feeling debilitated and languid, ſhe haſtily drank half a pint of red Port wine, in one morning; this increaſed the urgency of all the ſymptoms, ſuppreſſing altogether the expectoration. Another practitioner was called in, who, in lieu of the former medicines, gave her ammonia, and the patient made a ſpeedy exit. Mr. Paget, a very reſpectable ſurgeon of this place, met with ſeveral inſtances of Influenza, in which veneſection was eminently uſeful. No doubt but that this remedy (veneſection) has been miſapplied in the treatment of this as well as of other pectoral diſeaſes, and never with impunity. Whenever I made trial of topical bleeding, I found it *nearly* as efficacious as general blood-letting. Oleous medicines in general were ungrateful to the ſtomach. The patients did not uſually bear purgatives well. —Bliſters were particularly ſerviceable in relieving topical pain and dyſpnœa.—Relaxants did not anſwer ſo well as they uſually do in ordinary catarrh; ipecacuanha appeared to

be

be a more uſeful and agreeable medicine than antimony, as a relaxant.—Pediluvium was often very uſeful, eſpecially when uſed about the time of the acceſſion of the natural evening paroxyſm.—The inſpiſſated juice of the poppy, in the doſe of a ſcruple, proved a pleaſant anodyne at night, after the inflammatory excitement had abated. I never exhibited an emetic.—The ſquill and g. ammoniacum; the kali limoniatum combined with oxymel ſcillæ, were extremely uſeful.

13. I employed no other diet than the farinacea, toaſt and water, barley water, milk, coffee.

16. Relapſes frequent, more eſpecially in thoſe ſubjected to copious perſpiration.

17. Relapſes induced ſuppreſſion of the expectoration, increaſe of dyſpnœa, head-ach, heat and dryneſs of ſkin, with frequent rheumatic pains of the loins, and extremities; head-ach was never exceſſively violent in any of the inſtances which fell under my obſervation; ſcarcely any were altogether free from it, and many were diſpoſed to refer it to want of reſt.

18. Con-

18. Convalefcents recovered in general very flowly, excepting the young, who had not the difeafe with much violence.

19. Several of thofe who were predifpofed to phthifis pulmonalis, although perfectly free from any of its appearances at the time they were feized with the Influenza, had this tendency fo much aroufed by it, that a tickling cough continuing, or, frequent attacks of hoarfenefs, occurring with little cough at firft, but increafing afterwards, induced purulent fpitting, terminating fatally in about 5 or 6 months.

22. I have not formed a decifive opinion on this head.

24. In many families two or three were affected with the difeafe; generally, at firft, one only; but perhaps never the whole family. This report applies alfo to quære 23d.

31. No epizootic complaint reigned here during the prevalence of the Influenza.

I have omitted, by accident, I perceive, to remark above, that together with cough and hoarfenefs, many of the younger or middle aged patients had more or lefs inflammation of

of the mucus membrane of the fauces; in a few inſtances ſuppuration took place in one or both tonſils; in others, it attacked alſo the euſtachian tube and ear, and then formed a very unpleaſant part of the diſeaſe, producing temporary tinnitus and deafneſs.

ARTICLE XLI.

From Mr. H. SWAN, Surgeon, &c. Lincoln.

We had a great many patients affected with the late epidemical diſorder called Influenza, which differed from the uſual diſeaſes of the ſeaſon. It began here on the 15th February, but I had not many patients until the 11th of March when the number increaſed very rapidly, and on the 25th it ſeemed to be at its greateſt height, and continued in this ſtate ſeveral days, when it began gradually to decline, and from the 26th of April, I had no freſh patients. They generally began with a ſhivering, a diſcharge from the noſe, and other ſymptoms of catarrh. They complained of univerſal uneaſineſs, and when they were aſked what part was moſt affected, they ſaid they could not tell, for they had not a free ſpot about them. They complained of a ſoreneſs down the cheſt, and had an inceſſant cough, particularly when in a recumbent

bent pofture, but more fo during the night, and fome had a flight inflammation of the membranes of the throat. The pulfe was quick and low, but not hard, excepting in fome of ftrong habits. In old people there was a great degree of irregularity in the pulfe. The fweat in a night poured from them very profufely, more I think than happens at the end of an ague fit; and this was the cafe with thofe who took no medicine, as well as thofe who took fudorifics. The cheft was for the moft part affected, but this was not always the cafe, as one gentleman's family north of Lincoln had all the ufual fymptoms except the cough, and they all had fore throats. I did not find that the fymptoms varied much in different individuals, or in the different fexes, unlefs in certain degrees of violence. It was not fatal when unconnected with other complaints, as I do not remember to have loft a fingle patient who had not fome previous affection of the cheft. The proportion of fatality in my practice was very fmall, as it did not exceed one in forty. I did not find that it was confined to any ages, claffes, or conftitutions; as children, farmers, fervants

of

of ſtrong habit, thoſe of the middle age, and debilitated frames, as well as old people were affected by it. I think that old people, when affected, ſuffered moſt under the diſeaſe, but they and young children were not ſo liable to it. Both ſexes were affected pretty equally. Antimonials at the firſt abated the fever, and I think had the beſt effect when they operated gently by an emetic and purgative. The body was kept open by the kal. tartariſat. and other gentle aperients. I bled very few, and thoſe who were bled could not bear a repetition of the operation. I had not many caſes which required local bleeding. Gentle emetics did good in many caſes. I did not uſe ſtrong purgatives, as the ſymptoms of debility were ſo great. Opiates did much good, and were given pretty generally when no inflammatory or other ſymptom indicated their uſe. They quieted the cough, and abated many of the other ſymptoms. The perſpiration, when no ſudorific was given, was very profuſe, but not critical. Bliſters were applied, in ſome caſes where the cheſt was much oppreſſed, with advantage. At firſt I gave ſalines, but as expectoration ſeemed to afford relief, when the

the firſt ſymptoms were abated. I gave the gum ammon. with ammon. p[ta]., and a decoction of ſeneka, which I found uſeful, particularly in old people. The diet which I directed, conſiſted of broth, ſago, gruel, and ſuch things, with or without wine, as circumſtances required; but after the violent ſymptoms abated, the moſt of them required wine. We had ſome very warm weather for the ſeaſon, when the diſeaſe was about its height; and it diſappeared at a time when the weather was much colder. A moderate temperature ſeemed the moſt favourable. The fever very often abated in a few days, but the cough went off gradually, and generally by expectoration. Many had relapſes, but the ſymptoms varied little from the original attack, and I think they were leſs ſevere. Some convaleſcents recovered faſt, but moſt very ſlowly; and ſome even now complain that they have never recovered their ſtrength. Some had inflammations upon the lower extremities, and one woman had many inflammatory circumſcribed tumors upon her legs, which formed ſloughs, and produced conſiderable ulcers, which are not yet healed.

 When

When the expectoration became free, I gave bark, bitters ſometimes with, and ſometimes without volatiles, and other cordial tonic medicines. I allowed them animal food in moderation, milk and vegetables, and ſome had aſſes' milk. I cannot ſay poſitively that it was contagious, but in many caſes I ſuſpected it was; as ſeveral had eſcaped to nearly the time when it left us, and received the diſeaſe after ſome infected perſons came to the houſes where they reſided. But the diſeaſe was not general in the ſame houſe, as many eſcaped; and in many inſtances I have known that ſeveral fell ill on the ſame day, without having had any communication with infected people, I mean thoſe labouring under the epidemic. No particular concomitant diſorder, in my practice, ſeemed to combine with the Influenza. I attended two ladies' boarding-ſchools, and one for boys, but nothing particular happened in them. A conſiderable part of Lincoln is ſituated upon a hill, but by much the largeſt part is on the ſide of it, and in a valley expoſed to all the winds, excepting the lower part of it, which is defended by the hill from the north; but I did

did not find that one part of the town was more affected than the other; and I cannot learn in what direction it came to this place. Nor did I find that the progress of the disease depended upon the direction of the winds.

Lincoln, July 11, 1803.

ARTICLE XLII.

From Mr. JOHN WHATELY, Burton on Trent.

AUGUST, 10, 1803.

There has appeared no diſeaſe in this town, or its vicinity, the laſt ſpring, that materially differed from the diſorders uſually prevalent at that ſeaſon.—The report of a contagious catarrh, or Influenza, exiſting in various parts of the kingdom, called forth my greateſt attention; and about the end of April, I met with a few inſtances of catarrh, in which the febrile ſymptoms were for a day or two ſevere, eſpecially the pain of the head and back, but there was not the leaſt ſhadow of poſſibility for my ſuppoſing them to ariſe from human contagion; and the whole was probably merely accidental.—The caſes of pneumonia that came under my treatment, were perhaps fewer than uſual, but I thought bleeding in them of leſs ſervice, and my patients recovered

recovered ſlowly. For many months the ſcarlatina had been pretty prevalent with us, in the mildeſt form, and attacking chiefly female children: the inſtances of ſevere diſeaſe that occurred to me could all be traced to contagion received from places where it was more violent and fatal. The hooping cough and meaſles were both common the laſt ſpring, but uniformly favourable.

Burton on Trent has a low but dry ſituation. The river runs rapidly in a northwardly direction upon a gravel bottom; by actual admeaſurement it is only 90 feet above high water mark, and there is no ſtagnant water. On the eaſt and weſt are high lands, but where the ſituation was more elevated, I have met with no greater tendency to complaints. From the geological form of the country, the prevailing winds will naturally ſeem from the northward.

ARTICLE XLIII.

From Mr. TREVOR JONES, Litchfield.

JANUARY 26, 1804.

1. Early laſt ſpring an epidemical catarrh, commonly called the Influenza, ſpread all over the midland counties;

2. And appeared in this neighbourhood about the tenth of March.

3. Was at its greateſt height about the beginning of April, and

4. Diſappeared about the end of that month, or beginning of May.

5. The ſymptoms that uſually attended were chillineſs, laſſitude, wearineſs, and aking of the extremities; ſneezing, great ſoreneſs and pain under the ſternum, which were much aggravated by coughing, and a frequent pulſe.

6. The ſymptoms varied little in either ſex, but from the peculiar idioſyncracy of the individual, from advanced age, or from previous debility.

7. In

7. In no inſtance did it prove fatal when unconnected with other diſeaſes;

8. But in advanced age it ſometimes terminated in peripneumonia notha, and death.

9. It prevailed ſo generally that no particular age, or claſs was exempted; but thoſe previouſly diſpoſed to catarrhal or pneumonic affections, had it moſt ſeverely.

10. It did not appear to affect one ſex more than the other.

11. The treatment I found moſt beneficial was, in the early ſtage of the diſeaſe, to give ſmall doſes of calomel and rhubarb every night, neutral ſalts, ſaline draughts periodically, and conſtant dilution with tepid barley water, with gum arabic diſſolved in it. To relieve dyſpnœa, and promote expectoration in the ſecond ſtage, or when the ſoreneſs and pain under the ſternum, &c. were abated, I ordered lac ammoniacum, and tinctura ſcillæ. When a copious expectoration, in a more advanced period, and inceſſant cough prevailed, tincture of digitalis, and tincture of opium hardly ever failed in removing them.

12. I had ſeldom occaſion to adviſe bleeding, emetics, or bliſtering, and only in thoſe ſubject to pneumonic inflammation.

13. While the oppreſſive ſymptoms in the beginning continued, an aqueous diet anſwered beſt, which was gradually changed, according to their abatement; and frequently a full diet, with wine, was allowed, with manifeſt benefit.

14. The temperature of the chamber was adviſed to be about 60° of Fahreinheit's thermometer.

15. The termination of the diſeaſe was generally attended with a copious puriform expectoration.

16. Some perſons had frequent relapſes,

17. But not attended with pain, fever, &c. as at the firſt attack;

18. Hence it will appear that convaleſcents did not always recover ſpeedily, though they did in general.

19. Sometimes much languor and debility remained.

20. Convaleſcence was promoted by bark and myrrh, by opium, by digitalis, by air, and exerciſe.

21. Some

21. Some individuals had diarrhæa ſoon after they were attacked with Influenza. I did not perceive any other concomitant diſorder, and it was never ſevere.

22. I could not aſcertain that it was contagious.

23. Having no large "collections" of people, I can give no anſwer to this queſtion.

24. Two, three, and more perſons in the ſame houſe were affected, at or very nearly the ſame time. In other inſtances ſeveral days elapſed between the ſeizures.

25. Litchfield ſtands moſtly in a valley, through which a brook runs; is built of brick upon a friable red rock; is ſubject to no particular diſeaſe, and is eſteemed remarkably healthy. Upon a ſtrict inquiry I made ſeveral years ago, it appeared, upon an average of ten years, that the deaths were one in forty-ſix.

The water is excellent, conveyed from the neighbouring hills, by leaden pipes.

26. The ſouth-weſt, and the north-eaſt winds have moſt effect, by paſſing along the valley.

27. I could

27. I could not learn that there was much difference in the time of the Influenza appearing in Litchfield, and the neighbouring towns; but I believe that it began at Birmingham, S. S. W. of Litchfield firſt, and at Stafford after it had appeared in Litchfield.

28. I made no meteorological remarks, but I was informed that near the weſtern coaſt, freſh meat became tainted in much leſs time, during the prevalence of the Influenza, than uſual.

29. I cannot diſcover that the progreſs of the diſeaſe followed the direction of the wind.

31. No particular complaint was obſerved, previous to, or during the time the diſeaſe prevailed.

ARTICLE XLIV.

From Mr. GREGORY HICKMAN, Burslem, Staffordshire.

JULY 3, 1803.

Queries—Answers.

1. A catarrhal fever, with inflammation of the throat, trachea, and bronchia.

2. About the beginning of March 1803.

3. April 1803.

4. Beginning of May—same year.

5. All the symptoms of catarrh; with often, much dyspnœa, and sometimes the kind of wheezing observable in the croup, with sore throat; and often pain in the bowels, with constipation.

6. The symptoms pretty uniform, but varying in degree.

7 and 8. Very seldom.

9. Mostly grown up young people.

10. Rather most females.

11. Early emetics, blisters, and purges with

with calomel and rhubarb, in pretty full dofes, generally proved fuccefsful.

12. I never faw a cafe where the pulfe would admit the ufe of the lancet; and bliſters I preferred to topical bleeding.

13. Barley water, milk and water, linfeed tea; with *imperial* for common drink.

14. A moderate temperature was found beſt.

15. Sometimes an expectoration, but generally a gradual fubfidence of the feveral fymptoms, without any regular crifis.

16. They did fometimes happen.

17. The catarrhal fymptoms much lefs diftinct; difeafe refembled an attack of flow continued fever; and even, in a few inſtances, refembling typhus.

18. Where the difeafe was taken early, a fingle emetic, and fubfequent dofe of calomel and rhubarb, was often found fufficient for a cure; but on the contrary, the difeafe was often violent, and then the recovery extremely flow.

19. A ſtate of debility, more than commenfurate to the violence, or duration of the difeafe.

20. Nu-

20. Nutritious diet, a little wine or porter, and when the tongue is become *perfectly clear and moist*, yellow Peruvian bark.

21. Almost every occasional disorder, did more or less, assume the character of this, as is usual of other epidemics.

22. Not contagious; those exposed to its effluvia often escaped; while those apparently insulated, were often affected.

23. This place is the centre of that highly peopled district, the Staffordshire potteries, and I did not observe the disease to run through particular manufactories.

24. Sometimes two together; at others, at intervals, without any remarkable regularity of interval.

25. Remarkably high ground, diversified with hill and dale, but very little wood. Air strongly impregnated with sulphuric, and sometimes, marine acids, from the vast quantity of burning fuel *; and the use of common salt in some branches of manufacture.

26. W. N. W. nine months in the year.

* The coal is loaded with pyrites.

27. The

27. The progreſs ſeemed to be from S. E. by S. to the oppoſite points: I did not remark that it aroſe from intercourſe.

28. During laſt winter and ſpring, leſs ſnow, or fall of any kind happened, than has been known of many years.

29. During the exiſtence of the diſeaſe, the wind varied between N. E. and W., but was never long ſtationary.

30. I very imperfectly remember the epidemic of 1782.

31. During the continuance of the diſeaſe, I do not recollect any; but the previous year many horſes died, of what the farriers termed the mad ſtaggers; but, which upon diſſection, appeared to be occaſioned by an inflammation of the lungs, and ſubſtance of the heart, proving fatal in 36 hours; and within theſe few weeks, this has re-appeared; but leſs frequent, and infinitely milder.

32. This diſeaſe ſeems to have borne a ſtrong analogy to that deſcribed by Sydenham as prevailing in 1675, which he called "epidemic cough," &c. It is remarkable, that numbers who have been afflicted with the late Influenza, have ſuffered from a very obſtinate in-

flammation of the tarſi of the eyelids, which ultimately extends to the tunica conjunctiva, and then becomes very painful.—Upon the whole, however, *this* country has ſuffered very little; the diſeaſe has almoſt always readily yielded to mild emetics, mercurial purges, and bliſters.

ARTICLE XLV.

KETLEY, Shropshire.

JUNE, 28, 1803.

"GENTLEMEN,

"Pursuant to your request, I have sent such answers to the questions contained in your printed letter, respecting the late epidemic disorder, as my experience enables me to do, having myself suffered severely by *three* relapses of that dreadful malady.

"I am, gentlemen, yours respectfully,

"J. EVANS."

Answers to queries.

1. The disorder commonly called Influenza.
2. The latter end of February.
3. From the middle of March to the last week in April.
4. It gradually disappeared by the first week in June.
5. Pain in the head, back, and limbs, extreme debility, fever attended with costiveness, loss

lofs of appetite, and a total want of reft, which produced a great degree of irritability. Many perfons were deprived of both fmell and tafte, and were feized with a moft fevere pain in the fide. The urine, during the *height* of the difeafe, depofited a *pink* coloured fediment; and on the decline of it, feveral loft their hearing of one, or both ears. An entire deafnefs of the right ear, for the fpace of a fortnight, was cured in three days by electricity. A violent cough, with a very copious expectoration, frequently attended the difeafe throughout. Some few had a fpafmodic affection of the throat, with a fenfation of choaking; and feveral were hoarfe.

6. The fymptoms varied much in different individuals.

9. Aged and infirm perfons, and thofe who had been hard drinkers.

11. On the firft attack of the difeafe, emetics, mercurial purgatives, and diaphoretics, frequently put a ftop to the progrefs of it.

12. From the languid ftate of the patients in general, bleeding was only recommended in a few cafes where the pain in the fide was violent; but was not attended with any ap-

parent advantage. Bliftering the part affected always afforded confiderable relief. Opiates alone, or joined with camphor, in many cafes did not procure reft; but the following embrocation never failed in procuring a moft comfortable night's fleep. R. tinct. opii. fpir. ammon. c. linim. fapon. c. a ℥ij. m. The whole of this was rubbed into the back and fides of the patient at bed time. Spafms in the throat, and a dejection of fpirits were generally relieved by ether.

13. Broth, tea, coffee, chocolate, milk, and water gruel. As a beverage, foda water, toaft and water, balm tea, &c.—Oranges proved very grateful to moft people, but wine was too heating in general, except cowflip, which was an agreeable cordial at bed time. The tafte of malt liquor was extremely difagreeable to many.

14. A moderate temperature.

15. A gradual diminution of all the fymptoms of the diforder. The cough continued the longeft; and fome few cafes put on the form of flight intermittents.

16. Relapfes were very frequent on expofure to cold, and confiderably more fevere than

than the original attack, attended with *intolerable* ftitches in the fide and breaft.

18. Convalefcents recovered very flowly; on the cough ceafing, fome had a red, rough, itching, rafh, all over them.

19. They were left in a ftate of the *greateft* debility.

22. The prefent Influenza has *not* appeared to me to be contagious.—Three of my own family were feverely affected for fome weeks; but two fervants, who conftantly attended on them, remained free from infection. A fhopkeeper's family in this place was alfo not infected, although there was a continual refort of invalids to the fhop. At a brewery carried on in thefe extenfive iron-works, for the ufe of the workmen, not one of the family who have the management of it had the diforder, although many infected perfons frequented the houfe daily.

23. The workmen were moftly attacked in claffes. The labourers being more expofed to cold, were *firft* infected. The men employed in the furnaces were next feized with the diforder. Out of forty, who worked at

what is called the Puddling *, twenty were infected in the course of four days. The remainder of the forty were, many of them, very slightly infected, and a few not at all.

24. Many were affected in the same house at the same period, and in some families only a few; the remainder entirely escaping the infection.

25. Both low and elevated.

26. The north, and north-easterly winds prevailed for several weeks; but from the 26th of March to the 12th of April, the weather was remarkably warm; after that time it became extremely cold again.

29. The progress of the disease did *not* appear to follow the direction of the wind. The village of Kinnersley, six miles north of this situation, was not infected till a fortnight after it made its appearance in this place.

30. I recollect former Influenzas, which I think were less severe in their attacks, and of a shorter duration; also, that relapses were by no means so frequent.

* The Puddling is a particular process for the manufacturing of iron, where the heat is so intense, that the men work naked, having only linen trousers on.

ARTICLE XLVI.

Shrewſbury, June 9, 1803.

"GENTLEMEN,

"I take the liberty of offering the incloſed obſervations to the Medical Society. My friend Dr. Darwin put your letter to him into my hand, in conſequence of my having made this diſeaſe an object of particular attention.

"I have the honour of being

"Gentlemen, your moſt obedient ſervant,

"THOMAS DUGARD."

1. The Influenza.

2. On the 20th of February in a boy at the public ſchool. I did not ſee it again till the third of March, when it appeared in the ſame ſchool.

3. About the time of the Shrewſbury Lent aſſizes, (March 20th) the weather was then unſeaſonably hot.

4. But few caſes of Influenza occurred in Shrewſbury after the 20th of April.

5. The diſeaſe generally commenced with chilly and hot fits, head-ach, defluxion from the noſe and eyes, pain in the cheſt, back, and limbs, quick pulſe, parched ſkin, dry, white tongue, vomiting, and ſometimes coſtiveneſs. The cough then ſucceeded with increaſed ſecretion of mucus, difficulty of breathing, and dejection of ſpirits. The affection of the head ſometimes amounted to delirium. The tongue remained long white; and the difficulty of breathing was often very urgent.

The ſymptoms took the intire range of peripneumony, and ſpurious peripneumony, the characteriſtic ſymptom being an inordinate proſtration of ſtrength.

6. The ſymptoms differed much in different members of the ſame family.

7. The diſeaſe has not proved fatal in any inſtance that I recollect, where unconnected with a previous diſeaſe, or enfeebled habit.

8. About one in forty.

9. All claſſes and conſtitutions were obnoxious to the diſeaſe, adults more ſo than children, and amongſt the old it was moſt ſevere and fatal.

10. Both

10. Both fexes the fame.

11. and 12. The indications of cure were regulated by the variations of the fymptoms. In general a vomit, calomel, and fmall dofes of antimony: when the difficulty of breathing became great, accompanied with hard pulfe, bleeding was very ufeful, and in fome inftances I have been under a neceffity of repeating it; blifters were of fervice, but I found inflaming the fkin with muftard preferable for allaying the pain in the cheft, as the application could be repeated as often as the oppreffion at the præcordia was confiderable.

13. In the beginning the antiphlogiftic regimen.

14. I generally kept thofe patients, who were worft at the commencement of the attack, in bed, for two or three days, being the moft convenient method of keeping them temperate. The temperature of the apartment was recommended to be rather below than above 60.

15. It terminated generally with a cough and debility.

16 and 17. Relapſes were frequent, but generally leſs ſevere; ſometimes it aſſumed an intermittent form, appearing worſe every other day, or every third day.

18. No.

19. With debility and incapacity for doing their buſineſs with the uſual facility.

20. Gentle exerciſe in a carriage, or on horſeback.

22 and 23. In my opinion the Influenza was contagious, as is evinced by the circumſtance of the two ſchools, which I communicated to Dr. Beddoes, and Dr. Pearſon.

24. In the inſtance of ſchools many of the children were ſeized at the ſame time, where they had free communication with the inhabitants of the town. In private families the Influenza generally appeared in ſucceſſion; this was alſo the caſe in villages, in our county jail, the Infirmary, and other public inſtitutions, where there was not much promiſcuous communication.

25. Shrewſbury is ſituated high, almoſt ſurrounded by the Severn, and meadow land without

without marſhes. I did not perceive the ſituation to have any connection with the complaint.

26. The wind here, on the 20th of February, was N. by W. March the 3d, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th, 13th, 14th, 15th, 16th, 17th, 18th, N.W., N.W., S., N.W., N., N.E., N.E., N. by E., N., N., N.W., W., N., N., W., W. a freſh breeze. The 19th, 20th, 21ſt, 22d, 23d, 24th, 25th, 26th, 27th, when the diſorder was at the height, the wind was S.W., N., E., S., S.W., S.E., S.E., S.E., S.W., then continued weſterly. The height of my thermometer, in the open air, on a northern wall in the ſhade, ranged in this time, (viz. from the 19th to the 27th) from 56 to 66 at noon, except two days, when it was 51 and 53.

27. Firſt in Shrewſbury, then into the market towns, and villages around it, lateſt in Wales; and I have no doubt, but the diſorder is conveyed from place to place. Vide Letters to Drs. Beddoes and Pearſon.

28. If the Society think it worth while, I can furniſh them with a correct ſtatement of the weather, and thermometer.

29. Ludlow

29. Ludlow lies nearly S. from Shrewſbury; the diſorder appeared there the 27 or 28 of March, therefore could not have been conveyed by the wind, as at that time it was here in a ſouthern point.

30.

31. Horſes, dogs, and cats, were diſordered in this town, and in great part of the county, with ſymptoms ſimilar to the Influenza; many dogs were killed as mad dogs, which were not hydrophobic.

32. In ſome of the bad caſes the countenance and extremities were livid for ſeveral days; the firſt time I ſaw this ſtate of the diſeaſe, I concluded the patient was in articulo mortis, but finding afterwards that this was not the caſe, I ſuppoſed it to proceed from a deficient oxygenation of the blood, which may perhaps alſo account for the proſtration of ſtrength that characterizes this complaint from common pneumonic affections, attended with an equal urgency of other ſymptoms. In many caſes there was a diſagreeable ſaccharine odour in the breath, which remained for weeks. I do not recollect, in my whole experience, having ſeen

ſeen ſo many caſes of patients paſt 75 years of age, with hot dry ſkin, hard quick pulſe, and other ſymptoms of high febrile action; as I met with in one fortnight, while this complaint was at its height.

ARTICLE XLVII.

From Mr. EDWARD JONES, Montgomery.

JUNE 25, 1803.

1. An epidemical diſorder, more generally prevalent than any within the memory of man, made its appearance in this neighbourhood this ſpring.

2. It firſt ſhewed itſelf about the 14th March.

3. Was at its greateſt height from 23d March to 1ſt April.

4. Did not totally diſappear till towards the latter end of April, though it evidently declined from the commencement of the month.

5. Its moſt prominent ſymptom was great proſtration of ſtrength, in proportion to the degree of fever; in ſome caſes of robuſt young people, great determination to the head, with delirium, came on.

6. The ſymptoms varied much according to the age, conſtitution, and previous com-

plaints

plaints of individuals. I did not obſerve any remarkable coincidence in members of the ſame families.

7. A fatal inſtance has not come to my knowledge.

8.

9. The young and plethoric amongſt the lower claſſes had the moſt ſevere ſymptoms, but the recovery of the aged and infirm was longer protracted; there were very few of any claſs that eſcaped altogether.

10. Males and females, who fell under my care, nearly equal.

11. Gentle evacuations, with plentiful dilution, for the firſt three or four days of the diſeaſe, afterwards a tonic plan.

12. Where ſymptoms of topical inflammation occurred, the moſt decided good effects followed the early uſe of the lancet and bliſters; ſymptoms of pneumonia were frequent, and in two or three caſes which I ſaw, there was violent inflammation of the membrane of the trachea.

13. Light nouriſhing diet, compoſed of animal jellies, ſago, &c.

14. During

14. During the cold ſtage moderate warmth, but when the hot ſtage came on, great relief was generally experienced by the abſtraction of heat, which was generally effected by the application of towels, wet with vinegar, to the forehead.—The affuſion of cold water was not ventured upon, owing to the violent prejudices which exiſt againſt it.

15. I did not obſerve any diſtinct critical period—two or three caſes, however, terminated in regular tertian intermittent, which ſubmitted to the uſual remedies.

16. Relapſes ſeldom occurred.

17. When they did occur, were rather more ſevere than the original diſeaſe.

18. Convaleſcents recovered very ſlowly.

19. They were generally left very weak by the diſeaſe; and were long before they recovered their appetite for food.

20. Thoſe whom I was called upon to attend, not being, generally ſpeaking, in affluent circumſtances, my attendance was diſpenſed with, when the more ſevere ſymptoms had ſubſided.

21. In old infirm people a difficulty of breathing, and tickling cough, were ſymptoms peculiarly troubleſome.

22. I do

22. I do not think the diſeaſe was contagious, having in more than one inſtance ſeen a part of the family of a dirty crowded cottage ſuffer ſeverely from it; and others of the family, though ſleeping in the ſame beds with the ſick, eſcape.

24. When more than one was affected in the ſame houſe, it was generally at the ſame time.

25. The town of Pool is ſituated in a narrow vale, watered by the Severn, whoſe courſe is here from ſouth-weſt to north-eaſt. The town is ſheltered from weſt to north-eaſt, by high grounds; the habitations of the lower claſſes are cloſe and dirty; it contains about 1500 inhabitants.

26. The moſt prevailing winds are the weſt and north-weſt.

27. The firſt caſes of the diſorder appeared eaſtward of the town of Pool; and its progreſs to the weſtward was ſo diſtinctly marked as not to eſcape common obſervation, which progreſſion I did not obſerve to be at all influenced by intercourſe.

31. The profeſſional duties of the faculty were ſo much increaſed, during the prevalence

valence of this epidemic, that I had not leisure for obfervations, not immediately connected with profeffional purfuits; however, I do not find, upon inquiry, that any fuch complaint exifted.

ARTICLE XLVIII.

From Mr. RAYMENT, Surgeon, Worcester.

JULY 1803.

Queries 1, 2, 3, 4.

From the 21st of February to the beginning of March, fourteen cases of catarrhal fever came under my care, but without the discriminating symptoms of Influenza, so marked as to fix the attention at the time; from this period they took place as follows.

No. of Cases.			Cases.			Cases.
March 3d	1	March 21	7	April 3	3
7	2	22	7	4	5
10	3	23	5	5	5
11	1	24	7	6	2
12	4	25	5	7	5
13	4	26	11	8	2
14	3	27	7	9	2
15	3	28	6	10	1
16	1	29	8	11	5
17	3	30	4	13	3
18	6	31	4	14	3
19	17	April 1	5	15	1
20	9	2	3	19	1

in all 188; of these 80 were males, 108 females.

 5. Besides

5. Beſides the pyrexia, laborious breathing, a cough, the diſcriminating ſymptoms were great pain over the forehead, with ſome degree of giddineſs, a deep ſenſe of ſoreneſs on moving the eyes, conſiderable diſtreſs from ſtrong light, and in ſome from much noiſe; great averſion to ſolid food, thirſt exceeding what might have been expected from the degree of fever; great proſtration of ſtrength and ſpirits.

8. Only one fatal caſe occurred, and this terminated on the fifth day, with the ſymptoms fatal, in peripneumonia notha.

9. Corpulent, relaxated, and debilitated habits appeared almoſt excluſively ſuſceptible. I ſaw no children under five years old.

11. Tepid pediluvium, with a ſmall proportion of vinegar; calomel, and antimonial powder; at night decoct. hord. &c. with tamarinds by day, and after the firſt two or three days, a few drops of tra. opii, at bed time.

12. The very great proſtration of ſtrength in all the ſeverer caſes appeared peremptorily to forbid bleeding. It was not tried in the milder. Emetics were not uſed. Purging proved the moſt powerful means of lowering the

the fever; and in general, the ſtools were very offenſive. Bliſters were often uſeful. Strong opiates uniformly prejudicial. The cure was never attempted by active ſudorifics, except in the milder caſes; in thoſe they ſucceeded.

13. Light, demulcent, but more generous than in direct pneumonia.

14. In the ſlighter caſes, a free expoſure appeared to ſhorten, ſometimes even to remove the complaint; but in the more ſevere it was extremely prejudicial, and the moſt frequent ſource of relapſe.

15. More general by perſpiration, ſome few by diarrhæa. The more protracted caſes by expectoration.

16. Not frequent.

17. Febrile ſymptoms much aggravated.

18. Very ſlowly indeed.

19. Great loſs of ſtrength, ſpirits, and appetite.

20. Bitters and gentle aperients, diet nouriſhing, but not ſtimulating.

23. *The city gaol* including the governor's family, contained on an average 23, all of whom eſcaped.

The county gaol contained men debtors 11, and one woman debtor. Men felons 24, women ditto 15, with three children. The governor's family 7—in all 71; of theſe only the governor and his daughter had the complaint, and they very ſeverely.

The houſe of correction contained men 18, women 7, three children, and the governor's family 2, in all 30. Of theſe only the governor had it, and he alſo very ſeverely.

In a ſchool for young ladies, conſiſting of 33 reſiding in the houſe, not one was indiſpoſed; the day ſcholars were not equally exempt.

In a ſecond ſchool of the ſame nature, conſiſting, with the family, of 48; more than 20 ſuffered; but here only one of the pupils had the diſorder, with any conſiderable degree of violence; though the grown-up individuals of the family had it with that degree of ſeverity which more generally prevailed.

ARTICLE XLIX.

From Mr. JAMES FIELD, Surgeon and Apothecary, Worcester.

JULY, 1803.

1. The Influenza.

2. I think I had an inftance occurred fo early as the 11th of January, which however, fo foon merged into a fit of gout, as to render it uncertain. The fecond decided cafe I was called in to was on the 14th of February.

3. During the months of March and April.

4. Early in May it declined, but did not perhaps totally difappear, during that month.

5. Early and extreme debility, a diftreffing cough, expectoration frequently bloody; bloody mucus difcharged often from the nofe, and continuing, in fome inftances, long after the other fymptoms had difappeared; violent pains in the head or back, or both, entire lofs

loſs of appetite ; the pulſe weak, quick, and ſometimes uncommonly irregular.

6. The ſymptoms, (which in moſt diſeaſes are governed by age, habit, and temperament,) varied as little in different individuals, as in typhus, or any other continued fever.

7. In no inſtance that I witneſſed ; although ſome elderly perſons appeared to be in great danger.

21. Aſthmatic and peripneumonic complaints, which, combining with the Influenza, proved in ſome inſtances fatal.

22. I think not, from the circumſtance of its happening in ſome inſtances to ſingle individuals, in many, to two or three in a family at irregular and indefinite periods ; and above all, from its ſhewing itſelf in a very ſlight manner, and in a few caſes only, in ſchools, hoſpitals, and houſes of induſtry, ſituations certainly the moſt favourable for communicating contagious diſeaſes.

23. In our houſe of induſtry, containing about 160 perſons, nearly one half of whom are children ; not more than five or ſix were affected, and thoſe ſlightly, except one, an elderly

elderly woman, who has not yet recovered from the concomitant cough, &c.

The daily avocations of a complicated practice do not admit of a particular attention to all the queries contained in the Society's Letter. The mode of practice, and its various procefs has been already fufficiently detailed.

As, however, the queftion whether or not the late epidemic was contagious, appears to be the moft important, it feems to me, that, *if it had been fo*, the affirmative would be moft eafily proved; for, if contagious, we cannot but fuppofe it has *fome definite time and limits within which it muft produce its effects*; as in the fcarlatina, fmall-pox, meafles, and other well known infectious difeafes. It would then happen, that when one or more perfons in a family had been violently affected with the diforder, the other parts of the family attendant upon them, and conftantly expofed to the hazard of infection, would be *all falling ill nearly at the fame period*, which, however, did not happen in any cafe, out of fome fcores that fell under my obfervation.

ARTICLE L.

From Dr. CHARLES CAMERON, Worcefter.

JUNE, 1803.

1, 2. The late epidemic firft appeared here about the 4th of March.

3. It reached its acme in the laft week of March, and firft of April.

4. I do not think it has yet quite ceafed (June 1ft), but its fymptoms now, are more like thofe of acute rheumatifm, and I have feen two cafes of men, in which the pains left the limbs, and the bowels were attacked with fymptoms of inflammation.

5. Pain in the fide extending to the back, rigor continuing for feveral days with little intermiffion, and though a little perfpiration came on in a morning, the chillinefs returned upon getting up, hoarfenefs, and drynefs in the throat, head-ach, much aggravated by the cough, which was very violent, and fometimes fpafmodic, attended in a morning with expectora-

expectoration of a yellowish mucus, sometimes streaked with blood. Pulse from 80 to 90, never so hard nor full, as to require, v. s. in some cases, the uvula, velum palati, and tonsils were covered with small aphthæ, and the evacuations were highly bilious.

6. Plus, and minus, seemed to constitute the chief difference.

7, 8. I lost one young man, who, at any other time, I should have said laboured under typhus. I saw no other instance of fatality, except in a few whose constitutions were broken down by intemperance and previous disease.

9. It attacked all indiscriminately.

10. Rather more females, as they seem to constitute the larger proportion of the population.

11. Calomel and James's powder in the beginning, aq. ammon. acetata, or saline draughts with a little sp. æther. nitros. while the feverish heat continued, squill. with extr. cicutæ, and syr. papav. albi, joined with mucilage to relieve the cough, and finally to restore the action of the stomach, and consequently

ſequently the ſtrength, infus. gentian. compos.

12. Bliſters had a good effect; I did not try any of the other remedies.

13. Till the appetite was reſtored, chiefly ſpoon-meats, and fruit, the drink conſiſted of barley decoction, tamarind, apple, or cheeſe-whey, and imperial.

14. Cool, and thoſe who were able were ſuffered to walk out of doors when the weather would permit.

15. Gradual amendment.

16. No.

18. No. Cough, languor, and debility continued long.

22. In my opinion it was not contagious. I ſaw but two inſtances where the huſband and wife were both affected, and they too nearly at the ſame time, to ſuppoſe they received the infection from each other: but many, where only one was; and ſome inſtances occurred, where only one perſon was affected in a family, conſiſting of 8 or 9, this ſeems confirmed by the accounts from Perſhore and Droitwich, and by the diſeaſe commencing at different places, nearly about the

ſame

ſame time. The only occurrence which fell under my obſervation, which may ſeem to militate againſt this opinion is the following. In the beginning of April, the maſter of a family was ſeized with Influenza, attended with pain and ſwelling in the knees, ſince that time, a maid-ſervant, the apprentice, the daughter, and the wife, have all been taken ill in ſucceſſion; though their complaints have chiefly been, pain and ſwelling in the limbs and joints, without any catarrhal ſymptoms; the caſe of the young man, I have alluded to above, No. 4. he was removed to his mother's in the country, but has not communicated the diſorder to any of her family.

23, 24. In the Infirmary all the houſehold, 11 in number, were affected, but ſo ſlightly, as not to require the aſſiſtance of the phyſicians of the houſe; the ſecond perſon affected, was taken ill 3 or 4 days after her bedfellow; the third about 10 days after, but her bed-fellow not till near a month afterwards; here the firſt inſtance was too ſoon to ſuppoſe infection, and the laſt, in my opinion too late. Many of the patients alſo, in numbers generally from 54 to 60, had the diſeaſe

diſeaſe ſlightly, but in 3 beds pretty cloſe together, the 2 patients occupying the outer beds, had the complaint, whilſt the one in the middle eſcaped; and in our houſe of induſtry, where there are at leaſt 130 people, not more than ſix were affected.

The following are all the communications I have been able to collect, from the towns in this county.

Shipſton, ſouth-eaſt from Worceſter about 28 miles, firſt began; firſt week in March; has now ceaſed; did not appear to be contagious, no epizootic complaint.

Eveſham, ſouth-eaſt about 15 miles—commenced the beginning of March; was not contagious; no animals affected.

Perſhore, ſouth-eaſt 9 miles, began 10th March, not yet diſappeared, not contagious, in one family of near 30 perſons, only one ill. Horſes diſordered.

Upton, ſouth 10 miles—the firſt caſe of Influenza occurred the 28th of March; the laſt, 20th of April, not contagious; this opinion ſupported by the caſe of a child 11 years of age, taken ill on 30th March, and who died on 21ſt April, with every ſymptom of typhus,

typhus, the toes, fingers, and lips black; and yet none of the reſt of the family had any ſymptom of the diſeaſe. Horſes were diſordered both before the appearance of the diſeaſe, and during its prevalence.

Droitwich, north 7 miles, firſt appeared about the 10th March, ceaſed the end of April; not contagious. In the reporter's own family, between 50 and 60 in number, only 8 had the diſorder: it was by no means ſo general in the town as in the country; during its prevalence, the cattle were unhealthy, cows and ſheep in particular, and the farmers loſt an unuſual number of lambs. Cats alſo were affected, many of which died. I have not heard of any epizootic complaint in this town.

Worceſter, 10th June, 1803.

Worceſter, 17th June, 1803.

Since I tranſmitted to you the account of the Influenza, I have received the following ſtatements from the remaining towns in this neighbourhood, which, as they complete in ſome points, the hiſtory of the late epidemic, I preſume, may be acceptable to the Society.

Brom-

Bromyard, weſt from Worceſter 13 miles. Firſt appearance, 16th March, not yet ceaſed, 13th June, not contagious; no animals particularly affected.

Feckenham, north-eaſt 13 miles. Some inſtances occurred the beginning of February, has now ceaſed, not contagious; animals not affected.

Bromſgrove, north 12 miles. Began the middle of February; the laſt perſon was attacked on the 10th of May. My correſpondent ſays, "I am clearly of opinion it was contagious;" but gives no reaſons for ſuch concluſion.—Previous to its appearance, horſes were attacked with ſymyptoms, ſtrikingly ſimilar to thoſe in the human ſubject.

Bewdley, north-weſt 14 miles. Firſt inſtance, 22d of March, ceaſed in the town the latter end of April. A few miles in the country further north, it began later, and continued longer: from its univerſal prevalence, cannot decide whether it was contagious or not. Horſes about the ſame time were unhealthy.

ARTICLE LI.

" GENTLEMEN,

" I ſhould ſooner have acknowledged the receipt of your letter, but phyſicians being ſeldom conſulted here, except in alarming caſes, moſt of the caſes of the late epidemic which I ſaw either were complicated with pneumonia, or had terminated in typhus. I therefore put your letter into the hands of ſome of the beſt informed men I knew, ſurgeons and apothecaries, whoſe obſervations I now tranſmit to you.

" I am, gentlemen,

" Your obedient ſervant,

" C. PHILIPS WILSON."

Worceſter, July 30, 1803.

ARTICLE LII.

From Mr. JOHN NASH, Surgeon, Worcester.

2. About the 20th of February.

3. The latter end of March, and beginning of April to 20th.

4. The last week in May.

5 and 6. A violent pain in the head, neck, shoulders, loins, and limbs, redness of the eyes, sneezings, and incessant cough, thin mucus was discharged with the cough; in some there was nausea, in others not; the bowels were rather costive where the cough was violent; a lax state of the body rather relieved the cough, and with a complete diarrhæa there was little or no cough; a degree of fever attended the continuance of the disease, which produced great debility and loss of appetite.

7. No.

11. Gentle purgatives and mild diaphoretics, such as small doses of calomel, camphor, and

and antimonial powder, with the ſaline mixture, and infuſion of ſena (if required); emetics were given if the ſtomach indicated their uſe, but the above medicines generally cleared the primæ viæ.

12. Bleeding was not found neceſſary in the true diſeaſe.

13. Such as is generally directed in all inflammatory diſorders.

14. Warm.

18. No.

19. Greatly debilitated.

20. Change of air, and tonic medicines.

21. Such as had been before afflicted with inflammation of the thorax, and thoſe who had been much weakened by former afflictions, became victims.

22. Not from perſons affected, for many in a family were diſordered on the ſame day, and within the ſame week.

23. It did not affect all perſons in the ſame houſe.

25. The city of Worceſter, and neighbouring villages.

26. North-eaſt winds.

ARTICLE LIII.

From Mr. FRYER, Surgeon and Apothecary, Bewdley.

Anſwers to ſome of the Queſtions propoſed by the Medical Society of London.

1. No epidemical diſorder has appeared here, this laſt ſpring, that differed materially from the uſual diſeaſes of the ſeaſon.

2. The firſt caſes of Influenza, that occurred in my practice in the town of Bewdley, were on the 22d of March, 1803.

3. The diſeaſe was very prevalent, and at its greateſt height, during the 27th, 28th, 29th, and 30th of March.

4. It declined much before the middle, and diſappeared in the town before the end of April; it continued in the country ſomewhat later, particularly about Mamble, Kinlet, and over Areley, pariſhes that are ſituated to the ſouth-weſt, weſt, and north weſt of Bewdley.

5. The

5. The moſt uſual ſymptoms of the complaint were rigors ſucceeded by much heat, anorexia, pains of the head and limbs, redneſs of eyes, very troubleſome cough, hoarſeneſs, dyſpnœa, pains of the cheſt and ſides, great faintneſs and proſtration of ſtrength, particularly about the third day, bowels generally coſtive.

6. The ſymptoms did not vary much in individuals apparently of the ſame habits, &c.

7. When unconnected with other diſeaſes, it was fatal only in one inſtance.

8. The proportion of fatality was very ſmall.

9. Adults, perſons of the middle and better orders of life, were moſt ſubject to the diſeaſe, old people, and thoſe who had been ſubject to diſeaſes of the lungs, felt it moſt ſeverely and fatally.

11. The mode of treatment, employed with the beſt effect, was to give early in the diſeaſe, a doſe of calomel, with pulv. antimonialis and pulv. rhubarb, which generally occaſioned vomiting, and fully emptied the bowels with much relief, febrile ſaline mixtures, oxymel ſcillæ, mucilaginous anodyne medicines to

 allay

allay the irritation of the cough, rubefacients and bliſters applied freely, when the pains of the cheſt or ſide, or the dyſpœna were urgent; when the fever and theſe ſymptoms were much abated, the infuſum amarum and other remedies of that deſcription were very uſeful; the cortex peruvianus was only tried in one or two caſes, and in thoſe it ſeemed to diſagree,—bleeding was not had recourſe to.

13. An antiphlogiſtic diet was recommended at the beginning of the diſeaſe, afterwards a more ſtrengthening plan was adopted.

14. The room was directed to be kept of a moderate temperature, and the patient was deſired to avoid extremes of heat or cold.

16. Relapſes were not frequent.

17. Some patients recovered very rapidly, in others the recovery was ſlow, much debility remaining, and the cough, and dyſpnœa continuing ſome time, and going off gradually.

In the few fatal caſes in which the lungs were previouſly diſeaſed, it terminated in peripneumonia notha.

22. When at its greateſt height, the diſeaſe was very general, in ſome families the whole

whole were affected, in others, not more than one or two, and ſome families totally eſcaped it, although they had communication with families in which the diſeaſe was prevalent.

July 26, 1803.

ARTICLE LIV.

From Mr. CUSTANCE, Kidderminſter.

JUNE 21, 1803.

1. Yes, one commonly known by the name of *the Diſorder*, *New Delights*, or Influenza.

2. It appeared firſt in Kidderminſter, about the middle or latter end of February.

3. Towards the latter end of March, or beginning of April.

4. It ceaſed to be a general diſeaſe, about the middle of May; but individual caſes have occaſionally occurred, to the preſent day.

5. The moſt urgent ſymptoms were pain about the frontal ſinuſes, dyſpnœa, and cough, with fever.

6. Yes, very much. The difference, however, did not ſeem to reſpect either families, equal age, ſimilar conſtitutions or different ſexes, ſufficiently to draw any concluſions.

7. To

7. To the beſt of my own obſervation and other information, not more than ſix perſons died in this town (containing a population of between 6 and 7000) purely of the Influenza; two of which were infants, under a year old, one a girl of 14, of a ſcrophulous habit, one an old man of 70, one a hard drinker and corpulent, another a ſober man about 40, whoſe attack was clearly the Influenza, which in a few days, degenerated into typhus with petechiæ and ſore throat.

8. Cannot determine, but certainly it was very ſmall.

9. Perſons in the decline of life, the poorer claſſes, and conſumptive or pneumonic conſtitutions, ſuffered moſt.

10. Cannot determine, but think the difference trifling.

11. The antiphlogiſtic.

12. Bleeding was not uſed, but in two or three of the moſt urgent caſes of cough, and dyſpnœa; antimonials and bliſters were chiefly relied on, in the firſt ſtage, and the beſt effects almoſt univerſally followed the application of the latter in relieving the cough and

 pain

pain in the head. The ſquill pill, ammonia pp., &c. were often given, to promote expectoration, and the bitter infuſion with ſpt. æth. vitr. and very ſmall doſes of tinct. opii were invariably beneficial in reſtoring the ſtrength and appetite.

13. Antiphlogiſtic, at firſt, more ſtimulant and nutritive afterwards.

14. A cool one.

15. With profuſe perſpirations at night, dry cough, and extreme debility.

16. Not very—thoſe that occurred ought perhaps to be rather conſidered as ariſing from indiſcretion before the diſeaſe was removed, than from any freſh attack, though a few were certainly attacked a ſecond or a third time.

17. Generally leſs ſevere.

18. Few in leſs than a month, many much longer, and one gentleman did not recover his ſtrength, nor was free from his cough, in leſs than ten weeks, though before a healthy man of about 36.

19. Referred to the 15th anſwer.

20. Referred to the latter part of the 12th anſwer.

21. made

21. Made no particular obſervations enabling me to determine.

22. It has appeared to me to be contagious, for reaſons ſtated in the 24th, and 27th, anſwers.

23. No opportunity of obſerving.

24. Generally in ſucceſſion, at the intervals of from four days to fourteen, and even twenty.

25. Kidderminſter is a crowded manufacturing town, ſtands in a valley, upon the river Stour; the ſoil very red ſand, and ſurrounded with a ſoft rock of the ſame, mixed with gravel. A canal alſo runs through the town, which communicates with Mancheſter, and empties into the Severn at Stourport.

26. During the preſent year, moſt frequently to an eaſt or north-eaſt.

27. Stourbridge, about 7 miles to the north-eaſt, was affected about a fortnight before Kidderminſter, and Bewdley, and Stourport, between 3 and 5 miles to the ſouth-weſt, about the ſame period after. The inhabitants have daily communications with each other, from the trade of the town.

28. The barometer has varied little, during the year, between fair and changeable.

29. Have made no particular remarks.

30. Remember to have had the Influenza in 1782, but was too young to make any observations.

31. No.

32. None worth communicating.

ARTICLE LV.

From Mr. HORNIBLOW, Shipſton upon Stour.

JULY 1, 1803.

1. At and about this place, during the month of March, we had an unuſual degree of diſeaſe, the complaints were attended with much coughing, about one half of them were evidently inflammatory, more or leſs requiring bleeding, others had great debility with much coughing and expectoration, but little fever, and the pulſe but ſlightly affected, it continued upon the ſubjects of it about a fortnight before they could throw it off, it was not attended with ſpitting of blood.

6. I had at the time much coughing myſelf with great expectoration, but without debility or any other complaint (aged 41). My father (aged 64) of a ſtrong conſtitution had much coughing, great expectoration and great debility for about ten days, but his pulſe little affected,

affected, and he had but very little fever. In the same house a woman (aged 60) had considerable inflammation of her lungs requiring bleeding twice, she had great expectoration; and must have died without the use of the lancet.

7. Very little fatal, except in such cases as were considerably inflammatory, and bleeding not timely used. In the cases of great debility, coughing and large expectoration, with but little fever or quickness of the pulse, which is the complaint particularly in question, almost without fatality.

9. Do not recollect its affecting persons under thirty years of age.

12. Bleeding in one case I considered hurtfull, the blood not being inflamed, although the pulse was strong.

I saw one person I considered a convalescent, soon get worse and die, after the free use of infus. quass. with t. opii camph.

18. They recovered very slow.

22. Am not able to say it was contagious, I think it was not so, our patients were ill in the same house, at the same time.

25. Ge-

25. Generally.

29. I believed at the time that the diſeaſe aroſe from the keen north and north-eaſt winds, which continued long, and very piercing.

ARTICLE LVI.

From SAMUEL ALLVEY, M. D. Saint Neot's.

It appears to be the general wiſh of the medical world at this time to receive information from every quarter, upon the ſubject of the prevailing epidemic, in order, as fully as poſſible, to trace its commencement, continuance and ſymptoms, and to inveſtigate its contagious nature. Much has been ſaid and written upon this diſeaſe; it is tolerably well underſtood by moſt practitioners, and the more clearly ſo when it appears in its true and genuine form of *ſynocha epidemica catarrhalis*, and it may ſeem to ſome ſuperfluous to write upon the ſubject: nor is it my intention to take up much of your time, but ſtill I think with many others, that it is a praiſe-worthy underdertaking to bring forward our opinions and obſervations, and more particularly ſo in thoſe practitioners who have ſeen the greateſt variety of caſes, and to lay down in a conciſe manner that

that method of treatment which they have found beſt to ſucceed, as well as their diſappointments and failures, that upon the re-appearance of a diſeaſe ſo univerſal, ſo frequently diſtreſſing, and ſo often fatal, we may be better prepared to contend with it, and enabled to call in the agency of thoſe means, which were before found to be the moſt uſeful.

I find by the minutes made in my caſe book, that during the months of December, January, and February, the fever called typhus, but particularly typhus mitior was by far more prevalent with us than any other acute diſeaſe.

A few caſes of both ſcarlatina ſimplex and ſcarlatina cynanchica appeared at the ſame time, and ſeveral of thoſe attacked with typhus, had at its commencement a ſlight efflo-reſcence upon the ſurface of the body, ſome-times with, but more frequently without, a trifling degree of ulceration of the fauces; during the courſe of that time I only met with one inſtance, in which the fever was accompanied with a conſiderable ſprinkling of petechia, particularly upon the lower extremities,

and

and that young man recovered. The soreness of the throat in most cases went off in a few days, without at all influencing the crisis of the fever. I find also by my list of acute diseases for January and February, that nearly one in four were cases of typhus.

Towards the end of February acute rheumatism with slight inflammatory affections of the nose, throat, and chest, began with us to be very general, and about this time in London, and its vicinity, the genuine catarrhus contagiosus showed itself as a very formidable epidemic, and soon spread from the capital to the most distant provinces of the empire.

In my neighbourhood the month of March was ushered in with this Influenza, together with a variety of other inflammatory affections of the different viscera, for the most part perfectly distinct from each other, but possessing many symptoms in common, and almost always attended with a greater or less degree of catarrhal fever. It cannot be surprising, when we reflect upon the subject, that at the time an epidemic so very generally prevails, the diseases common to the same

season

ſeaſon ſhould aſſume ſymptoms more or leſs analogous, and ſo far acquire a mutual reſemblance to each other; I obſerved that by far the greater number of children, young people, and thoſe of middle age had the complaint ſlightly, continuing from 2 days to 7 or 8, and then it went off ſlowly; but ſome of them had a great degree of pyrexia with inflammatory ſymptoms of the moſt alarming kind, and this was obſerved to be the caſe more in ſome diſtricts than in others *.

It ſometimes happened, that this diſeaſe was accompanied, at its commencement, with a fever of the typhus kind, and when the catarrhal ſymptoms were leſs troubleſome than the fever, they would ſoon go off or be greatly diminiſhed in the courſe of a few days; while the fever remaining under the type of typhus

* In moſt parts of Bedfordſhire, particularly in the towns of Biggleſwade, Potton, Gamlingay, and in the villages and hamlets around them. At the latter named place, I was told by the vicar a few days ago, the Rev. J. Hepworth, that he buried in the courſe of a fortnight eleven people who all were ſaid to die of this diſeaſe, and the majority were children.

Gamlingay is a village containing about 500 inhabitants.

 mitior,

mitior, and ſometimes gravior, continued to haraſs the patient for a great length of time. —In elderly people this epidemic proved invariably obſtinate, remarkably troubleſome, and frequently fatal; ſhowing itſelf principally under the form of peripneumonia notha, and often, with the exacerbation of fever, would come on the moſt diſtreſſing dyſpnœa, with little or no expectoration. Many of theſe people were troubled with a moſt violent pain in the back, ſometimes between the ſhoulders, and often as low down as the loins, which would be among the laſt ſymptoms to leave them.

With reſpect to my method of treating this complaint, excepting where the inflammatory ſymptoms run very high, I abſtained altogether from the uſe of the lancet. *Demulcents, laxative medicines, gentle emetics, ſudorifics, the ſaline mixture, and bliſters*, generally leſſened the fever in a ſhort time, and removed the inflammatory determination to the head, throat, and cheſt; and when theſe were diminiſhed or removed, *and not before*, my attention was then directed to the cough, and weakened ſtate of the lungs. Mucilaginous,

ginous, but not heating expectorants, with ſometimes, if rendered abſolutely neceſſary from the watchfulneſs being very much complained of, or ſpaſmodic dyſpnœa being very urgent, opium in ſmall doſes, repeated according to circumſtances, and compounded with preparations of æther. The compound Burgundy pitch plaſter applied, ad nucham aut inter ſcapulas afforded theſe ſymptoms often much aid, and in two particular caſes where the pain of the back before mentioned was very troubleſome, gave great relief; to convaleſcents a light infuſion of the Anguſtura bark with oxymel ſimplex, and tinctura corticis cinchonæ proved a moſt uſeful tonic and reſtorative.

This has been the practice which I have followed with great ſucceſs in the treatment of this epidemic, which, when accompanied with other affections of the ſyſtem, or complicated with other diſeaſes, was varied from time to time according to circumſtances, and the urgency of ſymptoms complained of, conſequently that particular indication of cure termed by authors—"the mitigating of urgent ſymptoms" was never loſt ſight of.

During the months of March and April a great number of other diſeaſes, acute as well as chronic, have appeared and continue to ariſe, but by no means ſo general within the laſt fortnight; all of which, owing I preſume to the peculiar conſtitution of the atmoſphere, prove not only more than uſually obſtipanate and tedious in their progreſs, but our patients, for the moſt part, I find remain uncommonly long in a ſtate of convaleſcence, before they can be pronounced perfectly recovered.

I much regret that my opportunities of information do not allow me to be more full and inſtructive, but perhaps theſe efforts may prove a ſtimulus to ſome of our members to bring forward the ſubject, whoſe acquaintance with the diſeaſe is more general, whoſe experience is more enlarged, and whoſe obſervations have been more particularly directed to the inquiry.

Such, however, has been the unhealthy ſtate of the country during the whole of this ſpring, that it would be almoſt an unpardonble omiſſion for the members of any ſociety, who profeſs to keep a regiſter of medical caſes and obſervations, to paſs it by unnoticed. This,

This, gentlemen, will plead my excuſe for venturing to lay before you this rude ſketch and general outline of the ſtate of the health of my own county and neighbourhood, as far as my acquaintance with it enables me, and I hope you will believe that in drawing up this account I have ſtudied to be informing rather than eloquent, and to be uſeful rather than prolix.

Non quærit æger medicum eloquentem, ſed ſanantem. Seneca, Ep. 76.

ARTICLE LVII.

From THOMAS GIRDLESTONE, M.D.
Yarmouth.

The firſt caſes of Influenza which came under my obſervation this year, were on the 22d of laſt January. They prevailed more or leſs from that time, in this neighbourhood, and were moſt frequent between the 15th of March and the 20th of April. The diſeaſe then began to decline, but four caſes of true pneumonia, which occurred laſt Friday, June 17, to patients of Mr. Downs in this town, tend to prove that this diſeaſe has not yet ceaſed, though it may have changed a little its ſymptoms. One of the patients I have ſeen, and the blood which had been drawn. His ſymptoms were decidedly inflammatory, and the blood was of a buff colour, with the ſtrongeſt cup-like contraction I ever ſaw. All theſe caſes yielded to bleeding, antimonials, and a diet of broth, without any wine, ſpirits,

ſpirits, or malt liquor, during the febrile ſymptoms. The common ſymptoms of the Influenza were hoarſeneſs, ſneezing, defluxion from the noſe and eyes, chillineſs, heavineſs, and pain of the head, eſpecially over the eyes, cough, pain of the back, ſtitches of the ſide, with more or leſs of quickneſs of the pulſe, and whiteneſs of the tongue, heat of the ſkin, and rheumatic pains. In ſome there were ſoreneſs of the throat, or eyes, ſtiffneſs of the neck, great loſs of voice, icteric-coloured urine, and whitiſh motions;—and in children a remarkable drowſineſs almoſt univerſally commenced with the diſeaſe. Theſe ſymptoms very rapidly changed in ſome patients to the more alarming ſymptoms of effuſions in the cheſt. Clammy ſweats, ſtupid delirium, typhus-coloured tongue, frequent, feeble or interrupted pulſe, ſometimes with diarrhæa.

This diſeaſe was very different in the patients who reſided under the ſame roof. The ſymptoms of inflammation being almoſt the only ſymptoms in ſome patients; in others all the ſymptoms changed ſo ſuddenly as to require as ſudden a variation of the treatment. In children, and women, who were not aged,

or otherwiſe diſeaſed, it was generally a mild diſeaſe. But in the aged and intemperate, or where previous diſeaſe exiſted, it was variable, and alarming; for like moſt epidemics it blended itſelf with all chronic diſeaſes. I have very great doubts whether the Influenza has ever been a fatal diſeaſe unconnected with other diſeaſes, or the too early and liberal adminiſtration of opium, without the combination of either antimony, calomel, or ipecacuanha.

The proportion of fatality in this neighbourhood, I ſhould think, did not amount to one in three hundred. For though ſcarcely any of the inhabitants eſcaped in this place, yet in the many, it was a diſeaſe of only 3, or 5 days duration, and ſo ſlight that the patients often recovered without any medicine or medical attendance.

Though no ages or ſex appeared to be exempted from this diſeaſe, yet thoſe who had laboured under diſeaſed viſcera generally felt it moſt ſeverely. But there were ſome exceptions to this obſervation. As, but few of either ſex eſcaped this diſeaſe, and as there are more females than males in the kingdom,

in courſe more females than males laboured under the diſeaſe. Bliſters, antimonials, and calomel, were found very uſeful medicines, provided that they did not produce too much evacuation. I was ſeldom called early enough to try the effects of bleeding. There were ſome few caſes, where I think it might have been tried with ſafety. Full vomiting ſeldom formed a part of my practice, nauſeating medicines appearing to me to be more uſeful. But in ſome patients the ſymptoms varied ſo rapidly as to occaſion a very oppoſite mode of treatment. The worſt caſes appeared to me to have ariſen from the too early adminiſtration of opiates, which if uncombined with antimony, ipecacuanha, or calomel, hurried the ſymptoms into thoſe of typhus pneumonia. To a patient in this ſtate, after volatile alkali, ſmall doſes of opium and confectio aromatica had failed ſo completely, that the patient could not inflate his lungs or ſwallow more than a tea-ſpoonful at a time, the following draught, given every three hours, ſeemingly produced his recovery; for after every draught, he was found to breathe better.

R. Moſch.

R. Mofch. ver. gr. x.
Tinct. Thebaic gts. v.
Ammon. ppt. gr. vj. mucilag. gum. arabic. ʒſs. aquæ puræ ℥iijſs. m. Hauftus.

Lemonade, oranges, ſago, and broth, were found generally beſt for the diet, while the tongue had a whitiſh fur. When the tongue had more of the typhus appearance, wine-whey, beaf-tea, and Port wine, were uſed.

The greateſt number of children, who were under my directions, required no other medicine than as many oranges as they choſe to ſuck.

The rooms were never regulated by the thermometer, but they were deſired to be kept rather cool than otherwiſe. And as I never ſaw the benefit of preventing patients from lying down under any fever, I never recommended them to ſit up till the ſymptoms of fever diſappeared.

The uſual termination of the fever was like that of a common catarrh, by the expectoration of a pus-coloured mucus, precipitation in the urine, and ſcaling off of the fur from the tongue. But the feebleneſs of the thighs, back, and pains of the ankles, were generally

generally felt with more or leſs of ſpaſmodic cough for ſome time after the termination of the fever. The relapſes were but few. When relapſes did take place, the ſymptoms of debility very ſoon came on. Moſt of the convaleſcents felt themſelves weakened for ſome time, with the pains of the ankles, back, and thighs, and many of them had periodical returns of cough, or unpleaſant feelings every 2d or 3d day; and in thoſe who were previouſly conſumptive, their ſymptoms degenerated into hectic fevers with mucus or purulent phthiſis. The cough, which remained in many for ſome time, was often of the ſpaſmodic kind, and increaſed or diminiſhed as the appetite for food improved or diſimproved.

The treatment which ſucceeded beſt during the convaleſcent ſtate, was that which improved the appetite, and quieted the cough. Such as zincum vitriolatum, and extr. thebaic. pil. c. ſcill. with extr. thebaic. infuſ. roſæ, with tinct. thebaic. or medicines with myrrh, ferrum, ammonials, and extr. thebaic. or ammon. with bitters. The concomitant diſorders which appeared to combine with this endemic,

endemic, ſo as to render it moſt fatal, were thoſe of old age, intemperance, or phthiſis.

The preſent Influenza has not furniſhed me with a ſingle fact to lead me to believe that it is a contagious diſeaſe. Numbers in the ſame day were attacked, who had no communication with each other. And in the worſt caſe which I ſaw of this diſeaſe, where the typhoid ſymptoms were ſo evident, the nephews and niece, who night and day nurſed the patient for four or five weeks, all eſcaped without the ſlighteſt ſymptom of the diſeaſe. With the greateſt number of children, &c. who reſided in ſchools and other crowded places, this diſeaſe paſſed only as a common cold.

Numbers in the ſame houſe were attacked on the ſame day, others were attacked at the intervals of 12 and 24 hours, and ſome few at the 3d or 4th more diſtant day. Yarmouth and its neighbourhood are very much expoſed to the north-eaſt, and north-weſt winds.

The Norfolk and Suffolk ſides of Yarmouth were at the ſame time labouring under this endemic, and the more the facts of this diſeaſe

eaſe are examined, the leſs reaſon there will be found to ſuppoſe, that this endemic was regulated by intercourſe.

In the maſs of patients this diſeaſe differed but little from former Influenzas. In ſome the ſymptoms of debility came on more rapidly and laſted longer than in any preceding Influenzas.

During this epidemic, I have not heard of any epizootic complaint exiſting in this part of the country.

I ſhall annex an abſtract from a meteorological journal, which has been kept in this town from the commencement of this year to the preſent period.

A Meteorological Journal kept at Yarmouth on the Commencement of the Year 1803.

Months.	Weather.	Number of dry days.	Number of wet days.	Winds. E.	S E.	S.	S. W.	W.	N. W.	N.	N. E.	Heat. Highest heat.	Lowest heat	Medium heat.	Rain.
January		25	6	16	3	6	2			3	1	45	20	35	$\frac{3}{8}$ of an inch.
February		13	15	3	1	4	3	11	2	1	3	51	26	38	2 Inches $\frac{1}{8}$.
March		20	11	3	11	0	1	9	0	3	4	58	33	43	$\frac{5}{8}$ of an inch.
April		26	14	2	3	5	6	8			6	58	40	52	1 Inch $\frac{1}{8}$.
May		16	15	0	1	0	10	3	1	2	14	64	46	54	1 Inch $\frac{6}{8}$.
June		9	11	1	3	1	6	8			1	68	51	$60\frac{3}{4}$	2 Inches.

N. B. The journal for June includes only the first 20 days.

The last January has been the driest month of January in this town for these last nine years.

ARTICLE LVIII.

From Mr. WEBSTER, Denham.

JUNE 19.

1ſt. Queſtion. No epidemical diſeaſe prevailed in this neighbourhood during this ſpring, excepting the meaſles which were attended only with the uſual ſymptoms, and were not fatal.

2. The Influenza commenced here about the 12th of March.

3. Moſt predominant about the ſecond week in April.

4. It began to ceaſe, in the firſt week in May.

5. It was attended with great drowſineſs, proſtration of ſtrength, dry cough, and ſometimes the breathing painful, though not to a conſiderable degree.

6. I ſaw very little variation in the diſeaſe, excepting ſome individuals being much leſs affected than others.

7. It

7. It certainly has been fatal, when not connected with any other diſeaſe.

8. We loſt about four (to the beſt of my recollection), but I cannot ſpeak to the proportion of the whole, nor the number we *ourſelves* attended.

9. In elderly people and infants it ſeemed moſt fatal.

10.

11. A ſolution of opium in volatile alkali, given in ſmall doſes, and repeated every four or five hours, ſeemed in general the beſt plan of treatment.

12. We did not bleed in any inſtance, but have underſtood where that has been done, or ſpontaneous hæmorrhage has taken place, the patient has been ſlow in recovery. Emetics were in ſome inſtances beneficial.

13. Animal food or broth, with about a pint of wine, in the courſe of 24 hours was allowed.

14. Our patients were kept in the open air, as much as the weather would permit.

15. I obſerved no particular ſymptom in its termination, but left the patient in great

 debility,

debility, which required much time to recover.

16. We certainly had ſome caſes of relapſe, though not frequent.

17. The ſymptoms in the relapſe were like the firſt attack, but not of ſo long duration.

18. No.

19. Already anſwered.

20. Bark, vitriol, and Port wine.

21.

22. The Influenza does not appear to me infectious, no otherwiſe, than perſons breathing the ſame atmoſphere, may ſuffer the ſame diſorder. I do not recollect any medical man in this neighbourhood being much, if at all, affected by this diſeaſe.

23. I attend a large houſe of induſtry, but the paupers thereof had very little of this diſeaſe.

24. This diſeaſe has paſſed through almoſt the whole of private families, though very large.

25. I obſerved inhabitants of dry as well as marſhy ſituations, both equally afflicted with this diſorder.

26. North and north-eaſt winds chiefly prevailed.

27. I have no reaſon to think intercourſe has in any meaſure increaſed the diſeaſe.

28. I did not keep any notes of the weather, not expecting any application on this ſubject.

29.

30. I recollect the Influenza, (I think in 1774;) was then apprentice in Norwich, the ſymptoms were more ſlight, and of much ſhorter duration, the diſorder giving way in a few days to antimonials, or any other diaphoretic medicine.

31. Previous to the appearance of Influenza, I underſtood there was ſome contagious diſorder among the horſes.

32. I obſerved that thoſe patients who kept their beds, and in whom profuſe perſpiration was continued, or who ſuffered large evacuations, were moſt ſlow in their recovery.

ARTICLE LIX.

From Mr. CROWFOOT, Beccles, Suffolk.

JUNE 22, 1803.

We have been viſited by the general epidemic termed the Influenza, but by no means to that extent, or attended with the mortality deſcribed by ſome practitioners to have occurred in the metropolis, or in other large and crowded cities.

It firſt appeared with us in the beginning of March, might be conſidered at its greateſt height in the month of April, and to have continued, in the whole, about two months.

Moſt were ſeized ſuddenly and complained of lightneſs, or giddineſs in the head, nauſea, or loſs of taſte, frequent chillineſs, a general tenderneſs of the body and limbs, as if ſlightly bruiſed. Catarrhal affections generally ſucceeded, and attended throughout with roughneſs or ſoreneſs in the throat.—The cough extremely troubleſome, great ſenſe of

 weakneſs,

weakneſs, and an early appearance of white-neſs on the tongue, which ſeemed characteriſtic of the diſeaſe.

The ſymptoms varied much in different individuals ſome complained of deafneſs, others were ſeized with obſtinate vomitings, and particular irritation in the bowels,—but the moſt urgent ſymptoms were peripneumonia, and in ſome, caſes of phthiſis evidently accelerated the death of the patients.

I do not know it has proved fatal in any inſtance unconnected with other diſeaſes;—nor that any age, or claſs, or conſtitution was exempt from the diſeaſe.—Servants employed in huſbandry, or in the open air, were equally liable with thoſe whoſe buſineſs confined them within the houſe, and *vice verſa*.

As to medical treatment, emetics, and gentle aperients were firſt employed, opiates afterwards, joined with expectorants, had commonly a good effect, and bliſters upon the cheſt proved very beneficial in caſes of violent pain, and difficulty of breathing—very young ſubjects were immerſed in the tepid bath with manifeſt advantage—from the great weakneſs in general complained of, bleeding was rarely recom-

recommended. After the firſt day or two, light animal broths, &c. were allowed, and a moderate uſe of wine; and with reſpect to temperature, the feelings of the patient were conſulted, and it was regulated accordingly.

From the extreme variableneſs of the weather, and the debilitated ſtate of the convaleſcents, relapſes were very frequent; and in many inſtances the diſeaſe ended in the form of an intermittent.

The * Cinchona, Caſcarilla, and other tonic remedies were employed, with the vitriolic acid, to check thoſe profuſe perſpirations which frequently ſucceeded the complaint—theſe, with the occaſional uſe of chalybeates, and a ſuitable nutritious diet, were the beſt reſtoratives.

Two fatal caſes of cholera occurred which were apparently blended with the reigning epidemic; and indeed it ſeemed to increaſe

* I have lately made uſe of the broad leaved willow bark, (recommended by Mr. Wilkinſon, of Sunderland, in a late publication,) and though my experience will not allow me to ſpeak decidedly upon its merits, I have reaſon to believe it may prove a valuable medicine.

every other diſeaſe which exiſted at the time of the attack.

It appeared to me the Influenza was not contagious, becauſe medical men and nurſes generally eſcaped the diſeaſe—that although ſeveral perſons, and ſometimes a whole family, were affected by it, it was not in that ſucceſſion, or at thoſe intervals, which might reaſonably be ſuppoſed to depend upon contagion—and that often an individual or two, only were affected in large families, though conſtant intercourſe was kept up with the healthy perſons under the ſame roof.—On the other ſide it ought not to be concealed, that in two or three inſtances a caſual viſitor of the ſick was very ſhortly after affected with the malady, and it was attributed, by the individual, to this communication.

The ſituation of Beccles is on the banks of the Waveney, conſiderably above the level of the river, and is generally accounted a healthy town—it is diſtant in a direct line, about eight miles from the ſea, and is expoſed to the north and eaſt winds.—It is worthy of remark, thatLoweſtofft, which is one of the neareſt points of the coaſt, was very little, or not at all, affected with Influenza, when much indiſpoſition prevailed

prevailed with us, notwithſtanding the great intercourſe between the two towns.

I have nothing to obſerve on the analogies of former Influenzas, one of the laſt having happened when I was in India; nor did I notice any epizootic complaint previous to, or during the prevalence of the diſeaſe.

For the following meteorological obſervations, I am indebted to the journal of an intelligent and worthy neighbour, who is an accurate obſerver of the weather—his thermometer is placed on the north wall of an open room, and differs about four degrees from the ſcale of Farenheit. I have taken the extreme height and variation for the laſt four months, and the general direction of the winds which have prevailed; but ſhould it be thought neceſſary to tranſmit particulars, the whole ſhall be copied, and ſent to the Society.

The ſummer and autumn of 1802 were unuſually dry, and there was little froſt before the end of the year.

In January 1803, the weather continued mild until the ninth, the latter part of the month was ſharp and froſty, with much

 wind,

wind, chiefly from the eaſt and north-eaſt.—Thermometer during the month from 54 to $42\frac{1}{2}$.

February, the froſt continued to the ſeventeenth of this month, and the navigation of the river had been ſtopped by the ice, from the ninth of laſt month.

After the 17th the weather was very mild, with much wind varying from the north-eaſt to the north-weſt, and the laſt part ſouth-weſt and weſt. Thermometer $54\frac{1}{2}$ to 44.

March was ſeverely froſty the firſt part, the latter very fine and mild, good ſpring weather with very little rain. Wind extremely variable and boiſterous in the former, blowing a gale on the 7th and 8th, from the north-eaſt; the latter part ſouth-weſt, eaſt and north-eaſt. Thermometer 61 to 47.

April, mild and pleaſant the firſt part, very windy and very cold afterwards with hail and ſnow. Wind from the ſouth-weſt, and ſouth-eaſt to the north-weſt and north. Thermometer 61 to $52\frac{1}{2}$.

May, this month was windy and cold, with froſty nights in the firſt part; the laſt week ſome fine ſhowers with ſofter air, though

though ſtill windy. Winds weſt and ſouth-weſt, changing for ſome days to the north and north-eaſt, and returning in the laſt week to the ſouth-weſt. Thermometer 62½ to 54½.

ARTICLE LX.

R. WHITE, M. D. Bury St. Edmund's.

The epidemic called Influenza, in moſt parts of the neighbourhood of Bury St. Edmund's, except in the complicated ſtate of it, was by no means ſevere. Few there were who called for my aſſiſtance, excluſive of thoſe who were weak and infirm, or ſubject to chronic complaints. In the earlieſt ſtage of the diſorder ſimply and alone, therefore, I am not able to give anſwers to ſeveral of the queſtions ſtated, with the preciſion I could wiſh: more eſpecially with reſpect to its origin and progreſs in theſe parts. For theſe and other particulars, I am obliged to ſeveral of the faculty, in and about this town; who had a better opportunity of noticing them. With this preliminary I readily offer the reſult of my practice in this diſorder, and of my earneſt inquiries.

Queries.

Queries. 1. The common diſeaſes in the months of January and February previous to the Influenza, were catarrhs, rheumatiſm both chronic and acute, meaſles, and a few ſlight remaining attacks of ſcarlet fever.

2, 3. The epidemic was obſerved in this place, about the firſt or ſecond day of March; in ſome of the neighbouring villages ſooner, in others not ſo ſoon. About the 20th of that month it became pretty general.

4. Was at its greateſt height about the firſt week in April; and entirely diſappeared in the beginning of May.

5. The moſt urgent ſymptoms catarrhal, and peripneumonic, with ſlight inflammatory action, ſpaſmodic cough, uncommon debility; other more general ſymptoms were, dull muſcular and membranous pains in the head, neck, back, and joints; and with the dyſpeptic, ſinking in and about the præcordia.

6. Symptoms varied in different individuals, principally according to the nature of the conſtitution and habits.

7, 8. Fatal only in one inſtance under my care, when unconnected with any other cauſe; and that in a ſtrong healthy aged perſon, with

with marked ſymptoms of peripneumonia vera.

9. Middle-aged and infirm, relaxed perſons, moſt prone to the diſeaſe.

10. No abſolute difference with reſpect to ſex.

11. Treatment, gentle diaphoretics prepared with aq. ammon. acet. miſt. camphor. and ſyr. papav. a. as neceſſity required, ſoon after the attack; and at other times, during the feveriſh ſymptoms, bliſters and expectorants occaſionally; neither bleeding nor antimonials, ſometimes pulv. ipecac. comp. with calomel at night, and gentle aperients.

12. Very few of the practitioners in this part, either bled or gave antimonials, except on preſſing occaſions; both which means, although attended with momentary relief, they conceived were productive of increaſed debility: even at the firſt apparent inflammatory action.

13. Moderate diet agreeably to conſtitutional health.

14. Moderate temperature moſt ſuitable.

15. Uſually terminated by perſpiration, expectoration, or a copious ſediment in the

urine,

urine, in a few individuals, by a ſlight diarrhea.

16, 17. Few relapſes, except in the complicated ſtate. Relapſes ſimilar to the original attack, and proportionably leſs ſevere; but laſting, and attended with more debility.

18. Convaleſcents, with low regime, recovered but ſlowly.

19, 20. In moſt perſons the attack was ſudden, with remarkable debility, in all was ſucceeded by it. The ſubſequent treatment, a generous diet, light tonic bitters, decoct. or infus. cor. with due attention to alvine dejection; moſt habits having been troubled with coſtiveneſs.

21. The attack and progreſs commonly allied to the peculiar habit of body. Delicate and relaxed habits ſubject to catarrhal ſymptoms, and ſpaſmodic irritating cough; bilious, to retching, and painful affection in the ſtomach, and bowels; each, with wandering and aching pains in the head, neck, and joints; aſthmatic patients, with increaſed peripneumonic ſymptoms, and ſuffering moſt. In general, the tongue white, the pulſe quicker than ordinary, ſlight chills, but no ſharp rigor, excepting

No.

No. 7; irregular pains, laſſitude, and extraordinary debility; with ſome defluxion from the eyes; cough, dull pain in the cheſt, and over the eyes with moſt perſons.

22. Not contagious; from partial attack in moſt families, and non-communication to the major part of large families.

23. The diſproportionate number was particularly exemplified at the three principal boarding-ſchools, in this town. In one conſiſting of 72 boys, and 8 domeſtics; one only of the latter, and not more than 5 boys were attacked with the common ſymptoms, two of whom kept their beds for a day or two at the onſet. In another ſchool of 30, with domeſtics, not more than 4. And in a third of 50 young ladies, with teachers, and houſehold ſervants, no more than 3, all very ſlightly affected. Each of theſe houſes had not long before been viſited with the meaſles. Day ſcholars were indiſcriminately admitted, ſeveral of which claſs were affected with the epidemic.

24. There were a few inſtances of perſons ſeized on the ſame day in the ſame family; ſeveral

ſeveral at ſlight intervals, when at its greateſt height.

25, 26. Diverſity of ſoil in and about Bury. The ſite of the town, principally a ſtratum of light earth over chalk; the ſame in general is that of the villages in the flat open country, for ſeveral miles: theſe expoſed to north, north-eaſt, and north-weſt winds. That, of villages in oppoſite direction, and in an incloſed part, is a loamy earth on clay. Some difference in the effect of this diſorder has been remarked; namely, that the inhabitants of the town were proportionally leſs affected both in number and ſmyptoms, than thoſe of the country around; this alſo appears to have been the caſe in ſome degree, in favour of the bleak open country, with reſpect to the incloſed part of the neighbourhood.

27. Not regulated by intercourſe; the inhabitants of a village very near to Bury were lateſt affected; by ten days at leaſt.

28. My worthy friend Capel Lofft, who lives at Troſton, a village 6 miles diſtant from Bury, has favoured me with his meteorological remarks; whoſe obſervations did not extend to that of the winds; but I very

 well

well remember, that, about the time of the epidemic firſt appearing in this quarter, the air was cold and froſty, and the wind ſet in from the north and north-eaſt.

I muſt beg leave again to obſerve that I was generally called in to perſons labouring under the combined ſtate of the diſorder; in two of which caſes the ſymptoms were extremely indirect, and violent.—One in the laſt ſtage of pregnancy, the other ſoon after delivery. Both taken ſuddenly with catarrhal ſymptoms, pain in the left ſide, ſhortneſs of breath, conſtant and irritating cough, with inceſſant retching, attended with a weak irregular and innumerably quick or fluttering pulſe, for ſeveral hours together; ſlight delirium during the violence of the ſymptoms, and profuſe clammy cold ſweats; apparently dying. The firſt woman was delivered of a dead child on the third day after the attack, and died on the 5th. The other patient was put to bed with the Influenza, and, on the fifth day after delivery, was ſuddenly ſeized with pain as ſhe termed it at the heart; and the ſame kind of ſymptoms as the firſt; but with ſlight remiſſions. Happily ſhe obtained relief

relief from the means uſed on the former occaſion. Bliſters on the ſide, back and ſtomach, bolus with ſal ſuccin. camphor and conf. aromat., draughts with miſt. camphor., tinct. opii and ſpt. æther. vitr. comp., nutritive diet, and afterwards infuſ. cort. per. with light bitters.

June 11, 1803.

ARTICLE LXI.

From Mr. GODFREY, Surgeon, Coggeſhall.

JUNE 16.

The diſeaſe in this neighbourhood made its firſt appearance the beginning of February, was moſt prevalent in the month of March, and had nearly diſappeared by the end of April. The firſt and general ſymptoms were chillineſs followed by more or leſs of heat, remarkably white tongue, much pain in the loins and limbs, but very ſevere in the head, chiefly forehead. It is a little ſingular, that in a very conſiderable number of my patients the pulſe was rather ſoft, and certainly not quickened, though the tongue was white, and much loaded, the urine depoſiting a copious and red brick-duſt-coloured ſediment, and as much conſequent general debility, as where there had been a great degree of increaſed action in the vaſcular ſyſtem. There was in

almoſt

almoſt every caſe more or leſs inflammation about the lungs; ſome few (one with hæmoptœ) required the uſe of the lancet—an expectoration of thick mucus, exhibiting a very purulent appearance, ſoon came on, and continued ſome days without affording relief ſo ſoon as expected. Thoſe perſons who had been previouſly ſubject to cheſt complaints were the greateſt ſufferers; a total loſs of appetite was one of the moſt regular and common ſymptoms. Relapſes were not unfrequent, very ſimilar to the original attack, and as ſevere.

The treatment of the diſeaſe was nearly as follows; to ſome I gave an emetic, but to the far greater number I gave from 5 to 7 grains of the pulv. antimonialis at bed time, and repeated it for one or two nights following, if judged neceſſary, allowing a free uſe of ſmall cooling liquids, with ſome mild diaphoretics, and an occaſional gentle purge—if the cough was very diſtreſſing, leeches were applied to the ſtomach, and a bliſter, ſoon after their removal, on the ſame ſpot, avoiding as much as poſſible all oily and thick medicines—it was found neceſſary to relieve the

 cough

cough by opiates, which was very ſafely done by the ſyr. papav. alb. and ſpt. æther. nitroſ. in a mixture of three parts of the former to one of the latter, by the pulv. ipecac. comp. and tinct. opii camph.—Leeches to the temples were alſo of ſervice, when the pain in the head was unuſually ſevere—ſome tonic medicines were afterwards given, which much aſſiſted in reſtoring the general health: the above plan, in conjunction with the *vis medicatrix naturæ*, was very ſucceſsful; for out of ſome hundreds of *caſes* I loſt only two, and thoſe with high pneumonic ſymptoms, between 50 and 60 years of age, though I am ſorry to add that I now have two hopeleſs ones of phthiſis pulmonalis, which the diſeaſe in queſtion, I doubt not, laid the foundation of.

The obſervations I made on the progreſs and nature of the Influenza, lead me (I ſtate my opinion with caution) rather to conſider it not contagious by animal infection.

ARTICLE LXII.

From Mr. JOHN FISKE, Saffron Walden, Eſſex.

JUNE 18, 1803.

The epidemical diſorder commonly termed the Influenza, prevailed in this town and neighbourhood during the ſpace of about three months. We firſt obſerved its appearance about the middle of February, and it terminated the beginning of May.

In general the ſymptoms were ſo mild as to require but little medical aſſiſtance, and was conſidered, till it became more obſerved, to be the common occurrence of cold. Perſons above the age of maturity experienced its effects, and even to an advanced ſtate of years. Very few perſons younger than twenty were attacked with it. Some were affected by it only for a few days, and in the more ſevere caſes it confined them for two or three weeks. The proportion of females was conſiderably larger than males. The generality of patients

under my care were firſt ſenſible of having received its influence by pain in the loins, nauſea, head-ach, and alternate ſhiverings and heat, eſpecially perſons between the ages of twenty and thirty; coughing, ſneezing, and the diſcharge of a fine limpid fluid from their noſtrils ſucceeded. The diſcharge of lymph from the noſtrils in one lady was ſo great, that ſhe jokingly ſaid ſhe needed a ſponge to be kept conſtantly at her noſe, to catch it. Perſons ſubject to pulmonary complaints ſuffered conſiderably, eſpecially the aſthmatic; and one patient of that deſcription was attacked with the cynanche trachealis and was nearly ſuffocated, but recovered—he was bliſtered upon the cheſt, and over the trachea. It proved fatal to very few. In ſome families the generality of them had it, and ſome perfectly eſcaped.

Very few under the age of ſixteen came under my conſideration.

One lady, at the advanced age of eighty-ſix, had it, and died in a fortnight, apparently more from an infirm ſtate, than any baneful influence of it. Many very old people recovered from it; and it ſeemed un-

con-

connected with other diseases, except those of the chest, which I have before-mentioned. Many that had it slight complained much of debility for a week or two afterwards, but in general recovered without medicine. Its mode of termination was quicker in those where the attack was more severe. Few experienced relapse to my recollection, to any considerable degree. The diet was as is in general directed in feverish complaints. It happened more particularly to persons enjoying the comforts of life, or possibly those of a lower order shifted without application to medical practitioners in some degree.

The mode of treatment which I practised, when called in upon the first attack, and found the symptoms of an acute nature, such as pain in the loins, head, and nausea, was to exhibit a small dose of calomel joined with the antimonial powder and made into a bolus; it generally operated upon the intestines, and upon the exhibition of a second dose, in a few hours the patients became relieved, and I had only to direct a diaphoretic draught, composed of aq. ammoniæ, pulv. cont. comp., &c. to be taken once in a few hours; and some expedient to

relieve coughing, as emulſions and linctus. I uſed no opiates. In aſthmatic caſes, paregoric and ſquills; in ſome bliſters, and I do not recollect in any one caſe to have found it neceſſary to have had recourſe to bleeding.

ARTICLE LXIII.

From Mr. HASKER, Woburn, Bedfordſhire.

JULY 2, 1803.

I confeſs myſelf aſtoniſhed when I both read and heard of the prevalence of a diſeaſe ſo alarming to the faculty, and ſo dangerous to the community in various parts of England, as the one to which the name of Influenza has been affixed, has been. I muſt believe what has been affirmed by credible authorities, or my own practice would induce me to ſuppoſe, either that medical men have not been perfectly accurate, or that they have exaggerated circumſtances; if I may form an opinion from what has fallen under my obſervation.

In this neighbourhood, ſickneſs has certainly been rather more general than in any preceding ſpring, but this appeared to me obviouſly to ariſe from the very variable ſtate of

of the atmoſphere, ſome days being very warm, and others remarkably cold. Hence a variety of diſeaſes ariſing from a determination to particular parts. Thoſe which fell under my notice were either pneumonia, pleuritis, or cynanche tonſillaris, chiefly the former; both were very eaſily ſubdued by the lancet, by flannel to the ſurface, and by a treatment ſtrictly antiphlogiſtic. I remember but one inſtance in which the diſeaſe terminated fatally, and this was evidently pneumonic. The late ſpring has borne peculiarly hard on aſthmatic perſons; although the ſtruggle has been very ſevere, yet the event, under bleeding and bliſtering, and medicines compoſed of ſquills, has been univerſally ſucceſsful, at leaſt in this neighbourhood.

I have had ſeveral caſes of typhus at this ſeaſon, as at every other, but it ſeemed not to have any connection with the Influenza as it is called, but was, at its commencement, either ſynochus, or typhus.

ARTICLE LXIV.

From Mr. LUCAS, of Hatfield.

The Influenza appeared in Herts, certainly as early as the middle of February; and, indeed, I am perſuaded I ſaw it in a family of children, within a mile of Hertford, the very firſt day of February; the diſeaſe had with them every characteriſtic ſymptom that it afterwards diſcovered, and appeared clearly contagious. It however became general towards the end of the month, was at its greateſt height between the 10th and 25th of March; after which time it declined rapidly, and had almoſt diſappeared by the firſt week in April; none being attacked with it after that period.

I have no heſitation in declaring it contagious, as repeated inſtances occurred of its attacking almoſt every individual in a large family in ſucceſſion, with the intervention of (I think) generally two days. It alſo appeared that

that few efcaped it who were more immediately about the perfons of the fick; feveral inftances however occurred, where feveral in a family were attacked almoft inftantaneoufly, with ficknefs, or violent pain and diforder in the bowels.

The various and complicated forms, with which this difeafe exifted in the great numbers that laboured under it, make it difficult to defcribe its fymptoms, which exifted in every degree from the mildeft, to the moft aggravated ftate—there was however a fufficient connection between them to allow the whole to be traced to a common caufe whatever that may effentially be: it feemed capable of exciting great irritation in every part of the body; rarely amounting to active inflammation, but always inducing more or lefs of febrile diforder in the fyftem, and was followed, almoft invariably, by extreme languor and depreffion of the animal powers.

I fhall not trefpafs on your time by enumerating the fymptoms, or giving you in detail the mode of treatment that I employed, which was adapted to the relief of the more urgent fymptoms, as circumftances pointed

out,

out, conceiving it almoſt impoſſible that any regular plan could be laid down for the treatment of a diſeaſe the moſt irregular poſſible. One circumſtance, however, which I was ſtruck with early in the courſe of the diſeaſe, regulated in a great meaſure my treatment of it, and determined me to be cautious in the uſe of evacuants, particularly of bleeding.— This was the uniform want of force and ſtrength of the pulſe, and very frequently there appeared no derangement of the arterial ſyſtem at all correſponding with the other ſymptoms. Under this impreſſion, I only employed the lancet in two caſes; in one, I thought it manifeſtly detrimental; in the other, where there were ſymptoms of active inflammation of the cheſt, I was diſappointed in finding the expected relief from it; the pulſe being as much as 150 in the minute. I believe this patient owed her life to the friendly aid of the digitalis, which had the moſt ſpeedy and decidedly good effects.

There was another variety of pulſe not unfrequent, this was extreme ſlowneſs of pulſe, which was alſo weak; in ſeveral perſons there were only 60 pulſations in the minute; and

and in one lady, not naturally ſubject to ſlow pulſe, it was at 58 for many days, and did not amount to 65 for three weeks.—This lady complained of unceaſing and violent pain in the head, which was not, as uſual, relieved by bliſters; after a continuance of pain for about a fortnight, ſhe was ſuddenly relieved by a diſcharge of blood and fetid purulent matter, which iſſued abundantly from the noſe, and, as ſhe aſſured me, from the ears alſo; ſhe did not, however, quite loſe the pain or ſenſe of weight, but an exceeding ſtupor and giddineſs remained, with a total loathing of all food, except acids, a taſte very frequent in this epidemic; ſhe was with difficulty arouſed from her ſtate of extreme languor with wine. The volatile alkali was given in ſubſtance with aromatics and bitters; ſhe however recovered ſlowly, and was teazed, during her convaleſcence, with a great number of hard painful bumps in the ſcalp, and a ſucceſſion of whitloes on the fingers and toes.

In the firſt three weeks of the diſorder, cough was a conſtant ſymptom, and was for the moſt part extremely violent, and almoſt inceſſant. The weather having been previouſly

viously severely cold, and there being still, bleak north and east winds—during the last two or three weeks the cough was much less frequent, and very much less troublesome to the patients, probably owing to the mild weather that prevailed at the end of March, and beginning of April; and those attacked in this latter period generally suffered more in the head, stomach, and bowels. The disease, at this period, frequently assumed the form of typhus, and was protracted to as great a length as that disease; but even where the febrile symptoms terminated, as happened in the generality of cases, within a week, an excessive lowness was left behind, which rendered them incapable of the least exertion, and was removed with difficulty. Wine seemed useful in this state, and myrrh and other warm bitter medicines were also serviceable. This state of extreme weakness appeared not so much to consist in an exhaustion of muscular power, as in a general torpor and want of energy in the system, and was probably connected with the weak state of the digestive organs, which was remarkable throughout the whole course of the disease,

and

and was generally the laſt ſymptom that diſappeared; there was in almoſt every caſe an utter loathing of animal food, and a deſire for acids.

The cough, which was ſo general when the epidemic firſt appeared, was very unlike the cough of the common catarrh; the fits being more continued and violent, much reſembling the hooping-cough. In one inſtance of a woman of an irritable habit, and in a ſtate of debility, the cough increaſed to ſuch a degree on the third day of the diſeaſe, that it literally was inceſſant for ſeveral hours; when it was ſucceeded by hiccup for half an hour, the cough then returned with the ſame vehemence; bliſters and the ammonia ptt. in doſes of ſix grains, with $\frac{1}{2}$ grain of opium every two hours, with the muſk julep ſucceeded in removing that haraſſing ſymptom which had nearly hurried the patient out of the world; after ſome time ſhe had a relapſe, but the ſame means again ſucceeded in removing it.

I have not found relapſes frequent, and in general not ſo ſevere as the firſt attack, being ſeldom more than a return of ſlight febrile ſymptoms.

I am

I am happy to ſay that in the neighbourhood of Hatfield, though great numbers were attacked, it was not fatal, the mortality not being greater than uſual. The old, and thoſe labouring under pulmonic complaints, ſuffered moſt ſeverely.

Within this laſt month, I have met with a catarrhal fever in a ſolitary farm-houſe, exactly reſembling the late epidemic; cough and pain in the head being the moſt diſtreſſing ſymptoms; it was clearly contagious, having attacked every individual in the family in ſucceſſion.

With the greateſt reſpect I am,

Gentlemen, your obedient ſervant,

C. E. LUCAS.

July 5, 1803.

ARTICLE LX.

From Mr. JUDSON, Ware.

JULY 1803.

The epidemical catarrhal fever, or Influenza, began in this neighbourhood the beginning of March laſt, towards the end of the month was on the decline; the patients generally attacked with ſlight chillineſs, ſucceeded by heat, pain in the head, loins and lower extremities, accompanied with diſcharge at the noſe, cough, and hoarſeneſs, tongue white, ſome complained of ſickneſs, with vomiting of bile; there were ſome inſtances of much uneaſineſs about the cheſt, with inflammatory ſymptoms.

One individual being affected, thoſe reſident in the ſame houſe were generally partakers of the complaint. The moſt favourable attacks accompanied with expectoration, many inſtances ſo ſlight as not to require confinement. Elderly perſons, and hard drinkers,

drinkers, that did not expectorate freely, ſeldom recovered.

The complaint generally was relieved by gentle aperients, and diaphoretics, in three or four days—if they expoſed themſelves to the cold, had often freſh attack of fever becoming very tedious.

Advantage derived from an antimonial emetic, if the bowels confined, rhubarb combined with calomel; *very few* inſtances bleeding was neceſſary.

Bliſters applied to the occiput and thorax were found ſerviceable. Anodynes had little effect in quieting the cough.

The ſecondary attack (if I may ſo call it), accelerated pulſe, foul tongue, reſtleſs nights, frequently delirium, with all the ſymptoms of continued fever; this occurred in a few inſtances where the pneumonia, &c. had not been cleared on the *firſt* attack; not more than two inſtances proved fatal.

Children leaſt affected by the complaint.

Elderly perſons recovered ſlowly, light farinaceous and ſubacid vegetable diet moſt advantageous.

No epizootic complaint had prevailed to my knowledge.

Scarlatina anginofa had been very general amongft children.

Influenza did not fhew itfelf amongft the children, either in the feminaries or work-houfe.

Ware, Herts.

ARTICLE LXI.

From Mr. J. C. ROBINSON, Cooper's-Row, Crutched Friars.

JUNE 20, 1803.

After a ſevere froſt of near a month, the weather became ſuddenly warm, with little rain and leſs wind; the thermometer, which had been below 20, now roſe to 50. During the froſt, people were unuſually healthy for the ſeaſon: as ſoon as the thaw began, there appeared a diſorder very like the epidemic catarrh or Influenza, recorded and deſcribed by Dr. Fothergill and others in the Medical Tranſactions, in the Memoirs of the Medical Society of London, and in "L'Hiſtoire de la Societé Royale de Medecine," of Paris.

The firſt caſes that I ſaw were about the 14th February, from which time it continued to ſpread till the end of March, when it ſeemed to be at its greateſt height, and then

gradually to decline and difappear by the end of April.

Its general character was a catarrh, the fymptoms of which were chills, rigor, head-ach, fneezing, inflammation of the eyes, forenefs of the top of the larynx and œfophagus, cough, tightnefs of the cheft, white but moift tongue, pulfe generally quick, weak, foft and languid, in fome cafes, however, hard and full, pain in the loins back and limbs, great proftration of ftrength and dejection of fpirits, in fome fudden giddinefs and fainting: the bowels were generally confined; frequently, however, early vomiting and diarrhœa occurred, which appeared to prevent other fymptoms, and to fhorten the complaint.

Men and women were equally affected; children, though lefs fubject to it, did not entirely efcape: it feemed more generally and more violently to attack thofe who were expofed to the air, efpecially in the night. In fome families it affected feveral perfons within a few hours, in others in fucceffion after an interval of fome days. From thefe facts it appeared to me to be in its nature contagious, though it was communicated more generally

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and more violently by the influence of the atmoſphere.

I may alſo remark, that as many doubt its being at all contagious, it could not be very powerfully and decidedly ſo; and yet it ſpread through this and other countries with a uniformity, violence, and rapidity, which never happens to any of the moſt active contagions uninfluenced by the atmoſphere. Hence I conclude, though it might be, and often was communicated by contagion, yet that the atmoſphere was the general ſource of the diſorder.

As this complaint was not often attended with inflammation, neither did the ſymptoms require bleeding, nor did the weakneſs and dejection of ſpirits ſeem to allow it. Yet where the head was affected with violent pain, or giddineſs, cupping and leeches I employed with ſafety and advantage, and in a few young perſons, where the catarrh was accompanied by evident ſymptoms of pleuriſy, bleeding in the arm was equally ſerviceable. The remedies which I uſed were few and ſimple: ſeeing in ſome of the firſt caſes the good effects of early and ſpontaneous evacua-

tions, I gave a few grains of calomel and antimonial powder at night, and a ſolution of Epſom ſalts in the morning, which were repeated once or twice if neceſſary: afterwards ſaline and antimonial medicine, emulſions, opiates, and expectorants for the cough, ſometimes a bliſter to the head and cheſt, keeping in bed two or three days; diluting drinks, and nouriſhing broths, formed the plan of treatment. Recovery was ſometimes ſlow, and required the aid of bitters. Relapſes were not frequent, but in ſome this diſorder left a ſtrong diſpoſition to conſumption.

Upon the whole *this epidemic* appeared to me a ſlight complaint, and ſeldom fatal, except to the aged and infirm. One circumſtance remains to be noticed. This Influenza ſeems to have ſuperſeded or deferred the uſual diſeaſes of the ſpring, as the meaſles and ſcarlatina: this is recorded by Lorry to have been the caſe in the epidemic catarrh that prevailed in France, in 1775, but he adds that during the ſummer theſe complaints appeared with more than uſual violence and fatality.

ARTICLE LXII.

From MARTIN WALL, M.D. Oxford.

JUNE 10, 1803.

1. A disorder has certainly prevailed in this city and the neighbourhood, far and near, affecting, with more or less severity, almost every person in every family, in many points resembling the vernal catarrh which prevails more or less every year, but in this instance more early, and infinitely more general, and marked by some peculiar symptoms.

2, 3, 4. From the insidious manner in which the epidemic came on, it was almost impossible to set down the precise date of its first appearance here. I think it was about the latter end of January. It rose to its greatest height, or most general prevalence, about the third week in February, continued in this state nearly to the third week in March, when it began gradually to decline.

5. It

5. It commonly invaded very ſuddenly, with languor, rigor, gaping, debility, violent pain in the head, conſtriction of the cheſt, cough, commonly dry and harſh, ſucceeded by heat, quick pulſe, white tongue, and the common ſeries of febrile ſymptoms.

In many caſes there appeared, moſt clearly, an affection of the biliary ſyſtem, and probably of the liver itſelf, evinced by yellowneſs of the ſkin, and particularly of the eyes, and a ſenſe of fullneſs below the ribs on the right ſide, with high-coloured urine.

It was often attended with ſevere, but irregular pains in the loins, legs, and thighs, &c. The debility induced by the firſt attack, and aggravated by its continuance, was ſo extraordinary, as to produce almoſt the appearance of fatuity, with extreme diſpiritedneſs and deſpondency.

Moſt perſons felt a degree of ſoreneſs in the throat; the fauces, tonſils, and velum pendulum palati were almoſt always redder than uſual and ſwoln. I never ſaw any ulcerations, or aphthæ; but very frequent inſtances of tough viſcid mucus, which it was difficult to get off by the common efforts of ſpitting

and

and expectoration; and, when detached, the mucus was frequently tinged ſlightly with blood, and left the part ſore.

6. The ſymptoms ſeemed more to vary in degree than in character; and aſſumed a new form, whenever they were influenced by conſtitutional circumſtances, by previous diſpoſition to peculiar diſeaſes, or by ſingular idioſyncraſies.

What is here ſaid will apply equally to the caſes of individuals in every ſingle family.

7. In general it may be ſaid, that it was rarely fatal, when unconnected with other diſeaſes.

8. Though the epidemic itſelf ſeldom ſeemed to have a fatal termination, yet the number of deaths has, in this neighbourhood, greatly exceeded that of any former years, clearly proving, that the Influenza has had no ſmall ſhare in producing theſe numerous inſtances of fatality: but it deſerves particularly to be remarked, that juſt before the appearance of this complaint, during its reign, and ſince its decline, ſudden deaths, apoplectic, and paralytic diſorders have been uncommonly frequent here.

9. I be-

9. I believe no clafs of people, nor any peculiarity of conftitution was fecure from the attack of the epidemic: but children more generally efcaped it.

10. I did not obferve, that the difference of fex made any difference in the mode of attack, or the violence of the diforder.

11, 12. The beft mode of medical treatment of this complaint, according to my obfervations, confifted in the early employment of antimonials and calomel, in fmall and repeated dofes, fo as to act gently on the whole alimentary canal; the patient, if the diforder was violent, being confined to his bed.—Diaphoretic faline draughts were fometimes given, but I think without any pofitively good effect. Demulcent, pectoral, oily, mucilaginous, emollient mixtures and electuaries, which the cough feemed to call for, appeared to me to do harm, by ftuffing up the bronchia and impeding refpiration: even the ufe of opiates, fo urgently folicited and apparently indicated, was at beft dubious. They did not feem effectually to allay the irritation, they increafed dyfpnœa, they produced confufion of the head, and coftivenefs. In one patient,

patient, a lady of a very weak habit, a few ſpoonfuls of ſyr. pap. alb. taken by her own directions to allay the cough, very nearly produced ſuffocation. In ſeveral other caſes of ſimilar conſtitutions I witneſſed ſimilar effects from opium. After the firſt two or three days ſome light tonic, (and I found none ſo good as the infuſ. quaſſiæ,) with ſmall doſes of lac ammoniæ, with or without the ſaline mixture, according to the degree of heat, and quickneſs of pulſe, produced the moſt beneficial effects, relieving the breaſt, and reſtoring appetite and ſtrength. The cinchona did not act ſo favourably, at leaſt in the caſes where I tried it.

The great debility, which prevailed in every ſtage of the diſorder, prevented me from employing the lancet at any time. It had been ſometimes uſed, before I was called in to the patient, but I never recommended the repetition of its uſe, except in a few caſes which were decidedly pneumonic.

Bliſters were more frequently and ſafely employed, but in general were not required, except in complicated caſes.

13. In

13. In general I confined the patient to an abſtemious diet of farinaceous vegetables; but watching the debility carefully, and ordering wine, if I ſaw the ſtrength and vigour ſtill more impaired: and in ſome ſuch caſes wine and a more generous diet ſucceeded remarkably well.

14. Small, cloſe, hot, rooms were always injurious. Many received great benefit by opening the windows, or permitting them to go into the air.

15. The febrile ſymptoms gradually abated, leaving no mark of diſeaſe, but a great degree of laſſitude and dejection for ſome days, which yielded to light tonic medicines, a more generous diet, and exerciſe in the free air.

16. I had not occaſion to remark many inſtances of relapſes. Thoſe which I did ſee were milder than the original attack. In ſome perſons the diſorder ſeemed to remit for a few days, and then a new exacerbation (and that repeated 3 or 4 times) took place, which may be ſuppoſed to have been a continuation of the firſt diſorder.

17, 18, 19, 20. What I have ſaid on the immediately preceding queſtions, will convey my remarks relative to theſe four heads of your inquiry.

21. Phthiſical and pneumonic complaints, and rheumatic affections were the principal concomitant diſorders, which appeared to combine with the epidemic. The former aſſumed very alarming appearances, and the concluſion was often fatal, or the patients ſtill continue in a ſtate, which is attended with little hope. The rheumatic affections were ſevere, but ſhort, and the recovery perfect. We had alſo in this place ſeveral inſtances of diſorders in the bowels, colic with conſtipation, &c. but theſe ſeemed to me to be accidental. I have before noticed, as a concurrent circumſtance, that caſes of ſudden death, apoplexy, and palſy, have been very frequent in this town and neighbourhood, during the laſt 6 or 7 months.

22. This queſtion requires more evidence than I have been able to acquire, for the formation of a decided opinion. With deference I venture to obſerve, that though the complaint might ſometimes ſeem to be con-

tagious,

tagious, from a mode in which it attacked perſons in the ſame family, who lived conſtantly in the ſame rooms, and ſlept in the ſame bed; yet in general it did not appear to be propagated by contagion, but by an influence of the air, not unlike that which is at *this very time* ſpreading its blighting effects through the woods in this neighbourhood. The preceding ſeaſon may have prediſpoſed to diſeaſe, certain tribes of vegetables, particularly the elms, and the blighting air now acts upon thoſe moſt prediſpoſed with full influence, ſo that in many places all the leaves are deſtroyed, as if by actual fire. Other trees more ſtrong have been leſs injured, and ſome in every wood continue in perfect health and verdure. I preſume to advance this only as an illuſtration.

23. I had no opportunity of making any remark, that can illuſtrate this queſtion.

24. It happened in ſome families that three or four perſons were attacked all nearly together; others afterwards ſucceſſively, hardly one eſcaping, but without any regular or equal interval interpoſed.

25. The

25. The ſituation of the places where I have attended patients under the Influenza is very various, the circle of medical practice round this place being very wide. The local circumſtances of places muſt therefore differ greatly.

26. The country in which our practice chiefly lies is expoſed to every wind that blows, but Oxford particularly to the north-eaſt, north-weſt, and ſouth-weſt.

27. I had not leiſure to remark the progreſs of the epidemic, the hurry of buſineſs which it cauſed, being beyond what was remembered by the oldeſt practitioners in this neighbourhood, keeping us in perpetual exertion, night and day, for ſeveral weeks, eſpecially in the months of February and March.

28. It may be remarked that the weather, in the laſt months of the year, eſpecially November, December, and the beginning of January, was particularly mild, ſoft, and relaxing in this kingdom. Though we had frequent accounts from the Continent of the froſt, and that the Elbe, &c. were frozen up, the climate here continued open and mild, and the wind ſouth-weſt, or north-weſt till about

 the

the 10th of January, when the wind veered round to the eaſt, and a ſevere froſt took place, and laſted, with occaſional intervals, to the third week in February. Very little ſnow fell, but a good deal of half congealed ſleet. It may be imagined that the ſoft warm weather of the earlier part of this period, gave that relaxation to the human frame, which formed the prediſpoſition for the new diſeaſe, when the eaſt wind imported it from the Continent, and forwarded its malignant influence by the coldneſs of its blaſt, operating upon the relaxed fibre.—For,

29. The diſorder prevailed, I have heard, in France, eſpecially at Paris, and in ſome of the northern departments of the Republic, and in Holland long before we experienced it here. It was prevalent in thoſe countries, while the wind being here in the weſterly points, prevented its importation, till the wind went round to the eaſt and north-eaſt, where it continued more or leſs for many weeks. Hence probably it was, that it prevailed more early in London than in this part of the kingdom, and in this neighbourhood more early than in Lancaſhire, the weſtern, and north-

north-weftern parts of the kingdom. If this remark fhould be ftrengthened by other obfervations, it may feem to fhew that the progrefs of the diforder followed the direction of the wind.

30. I very well remember feveral epidemic catarrhs, but none fo perfectly as that of 1782, as I fuffered feverely from it. There was a great analogy between that diforder, and the object of our prefent inquiry, but in fome circumftances they differed greatly. The epidemic of 1782, prevailed in May and June, and it was more decidedly marked by fymptoms of coryza, fneezing, weaknefs of the eyes, pain in the cheft preceding the cough; but I do not remember that there was any fign of affection of the liver, or biliary fecretion. It was attended with the fame debility as the late epidemic, perhaps even more remarkably and fuddenly, in fome inftances, than this. The ufe of the lancet was then very injurious, and in general wine and cordials were not only admiffible, but neceffary.

31. I do not recollect that any difeafe prevailed amongft quadrupeds, or domeftic birds, previoufly to either of thefe epidemics.

If the remarks here offered can be of the leaſt uſe to the Society, I ſhall be very happy. At any rate it will be a ſource of ſatisfaction to me to have been able to attend to their requeſt, and to ſhew the reſpect I entertain for them individually, and in their collective capacity.

I remain, Sir,

Your very obedient ſervant.

M. WALL.

ARTICLE LXVII.

From JAMES WOODFORD, M. D.
Almsford.

JUNE 10.

Queſtion 1. No other epidemical diſeaſe has appeared in this neighbourhood, during the preſent ſpring; and excluſive of the Influenza, there have been fewer diſeaſes than common.

2 and 3. The firſt well marked caſes falling under my obſervation happened in the beginning of March, and it attained its height the beginning of April.

4. It ſtill continues in a ſporadic form; and with as great (or greater) ſeverity than on its firſt appearance.

5. The diſeaſe commenced with rigors, often ſevere, and laſting ſeveral hours, or with chillineſs, followed by feveriſh heat, and accompanied with vertigo, head-ach, pains in the limbs, but eſpecially in the back and loins, and at different times in almoſt all parts of the

chest, with an oppression and sense of stricture about the præcordia, great and sudden general debility, with anxiety, restlessness, and depression of spirits: a frequent dry cough with sneezing, and a thin acrid defluxion from the nose, a watery discharge from the eyes, which were often red and inflamed. The tongue white in the *middle*, or with a brownish fur, but *moist: at the edges moist and clean*, thirst moderate. The functions of the alimentary canal generally disordered by sickness, vomiting, or diarrhœa. The pulse was from 80 to 100, soft and rather full, but seldom strong and hard. The urine was generally high coloured, with a lateritious sediment; scarcely any sleep during the first days of the disease. The pains in the chest, or sides, were often very acute and violent, much increased on coughing or on any motion of the body; but they seldom continued long fixed in one part, and though increased on making a full inspiration, were certainly not attended with that great and permanent dyspnœa, so usually attending genuine pneumonia. A total loss of appetite commonly occurred with a loss of distinction of

taste.

taſte. I believe there are no ſymptoms more ſtrictly pathognomonic or characteriſtic of the Influenza, than ſudden proſtration of ſtrength, and depreſſion of ſpirits. Theſe were always evident, even when the other phænomena were very ſlight.

6. The diſeaſe varied extremely in individuals of different ages, and conſtitutions, but were pretty uniformly the ſame in thoſe of ſimilar ages and conſtitutions.

7. I have ſeen no fatal caſe of Influenza, when unconnected with other diſeaſes.

9. The middle aged, and thoſe between 50 and 60, of robuſt and plethoric habits, accuſtomed to vinous or ſpirituous potation, or to the inclemencies of the atmoſphere, ſuffered moſt ſeverely. Young children for the moſt part had a mild diſeaſe.

11 and 12. The diſeaſe was ſucceſsfully treated by confinement to the houſe or to bed, by the liberal uſe of diluting cooling liquids, emetics, purgatives, and diaphoretics. In caſes attended with pulmonic congeſtion, or inflammation, an early and moderate v. ſ. i. e. ℥x or ℥xj. with repeated bliſters, and antimonials at the uſual intervals, never failed

to afford great and ſpeedy relief. In every inſtance the bleeding was borne eaſily, the blood appeared ſizy and often preſented the cup-like appearance. In ſome caſes bleeding was repeated a ſecond and a third time with evident relief: this was done, even in a man aged 75, but who was of a full plethoric habit. I have reaſon however, to think, that, notwithſtanding the above effects of bleeding, they might often have been ſuperſeded by repeated bliſtering. Emetics were frequently indicated from ſpontaneous vomiting, and they often had the beſt effects in rendering all the ſymptoms milder; ſo had purgatives, which were likewiſe often required for coſtiveneſs, 2 or 3 grains of calomel, with 6 or 8 of rhubarb, and followed by inf. ſenn. c. natri tartariz. ʒii. val ʒiij. commonly anſwered theſe intentions.

A warm general and moderate perſpiration, at the commencement of the diſeaſe relieved, all the ſymptoms, eſpecially the pains, dyſpnœa, and oppreſſion about the cheſt: in ſome, antimonials produced theſe effects: in others, the ſaline, neutral ſalts, and particularly the aq. ammon. acetat.—Profuſe ſweets

ſunk

ſunk the patient, and aggravated all the ſymptoms. Opiates in any form were hardly admiſſible before the ſubduction, or a great abatement of the inflammatory ſymptoms: then, united with light tonics, and expectorants, they abated the cough, procured reſt, and reſtored ſtrength. The inf. gentian. compoſit. or inf. quaſſ. with muriatic acid, anſwered with moſt.

Broths made by boiling animal and vegetable ſubſtances in water, were particularly indicated at this period; as alſo the allowance of two or three glaſſes of wine, a-day.

15. It generally terminated by a free and copious expectoration of viſcid phlegm, and yellowiſh mucus; at leaſt when ſuch an expectoration happened, the diſeaſe ſoon diſappeared.

18. Convaleſcents recovered very ſlowly, complaining for ſome time of langour and debility of body, with lowneſs of ſpirits, and an impaired appetite.

By gentle exerciſe in the open air, a light nutritious diet, with tonics, and a moderate uſe of wine, perfect health was at length reſtored.

21. When

21. When the Influenza attacked ſubjects apparently prediſpoſed to phthiſis, it never failed to increaſe and call into action the latent ſeeds of that diſeaſe; and in ſeveral inſtances to induce ſpeedily a confirmed ſtate of it, which quickly proved fatal. Of this I ſaw one caſe a few days ſince. It was a female aged twenty-three, and born of conſumptive parents; but who at the time ſhe was ſeized with Influenza three months ago, was free from any evident phthiſical ſymptom.

22. This malady attacks ſo many at the ſame time, and is ſo widely diffuſed that I think we muſt aſcribe its ſource to the ſtate of the atmoſphere.

24. In ſome families I have ſeen ſeveral attacked nearly or quite at the ſame time: in others again in ſucceſſion. I have alſo ſeen inſtances of a huſband, or a wife only being ill of it.

26. The places in which I have made my obſervations are expoſed chiefly to the ſouth-weſt, weſt, and north-weſt winds.

ARTICLE LXVIII.

From Mr. BUSH, Frome.

SEPT. 10, 1803.

The Influenza appeared in this neighbourhood about the beginning of March, it attacked many perſons during that and the ſucceeding month, and till about the middle of May, when the number affected was leſs, and the ſymptoms appeared milder, yet ſeveral perſons were ill of the diſeaſe in its genuine form in July.

The diſtemper was uſhered in by conſiderable langour, followed by ſlight ſhiverings, accompanied with heavineſs and pain in the forehead, ſometimes the pain was confined to one ſide of the head, frequently with redneſs of the tunica conjunctiva, and a diſcharge of lymph from the eyes. The fauces were affected with ſoreneſs and redneſs, but in a few inſtances only, ſo as to be a diſtreſſing ſymptom.

ſymptom. The pulſe was conſiderably harder than natural, *not full*, and generally between 90 and 100 beats in a minute, but more accelerated towards night.—The tongue was covered with a dry whitiſh fur in the middle, and with red moiſt papillæ on the edge; in a few inſtances where the ſymptoms were ſevere, the tongue exhibited a browner hue in the middle, but the florid ſtudded edge was pretty uniform. Pain and ſtitches about the muſcles of the diaphragm, and hard cough came on a few hours after the acceſſion of febrile ſymptoms; the urine was high coloured and without ſediment; the cough continued to increaſe, and on the third or fourth day a very copious exputition of a whitiſh muco-puriform matter came on, which did not afford that relief experienced by free expectoration, in common catarrh. The pain about the cheſt continued to increaſe, and was only ſubdued by the application of bliſters, and leeches, and in many caſes both were neceſſary.

Diaphoreſis was eaſily excited, but not attended with any immediate relief. The diſeaſe ran on a fortnight, or even a month,

when the irritation of the cheſt, and febrile ſymptoms went off, the exputitia diminiſhed, the urine depoſited a ſmall quantity of whitiſh ſediment, and the patient began to experience convaleſcence, but the advances towards health were commonly very ſlow.

In many inſtances the firſt ſymptoms the patient complained of were laſſitude and dyſpepſia, which was deſcribed by the ſick as want of appetite, attended with rambling and uneaſy ſenſations about the præcordia, and a twiſting of the bowels. If cathartics were given at this period of diſeaſe, it was arreſted in moſt inſtances, or rendered ſo mild as to require no other remedy than a repetition of the laxative. I ſaw the diſtemper ſeveral times combined with acute rheumatiſm.—Emetics were uſeful, if given before the inflammatory ſymptoms of the cheſt came on; if they had made their appearance, mild laxatives, and an aqueous regimen were proper; acetated water of ammonia, ſquills, and opium, were variouſly combined, and ſeemed to afford occaſional relief. General bleeding was not uſed in any inſtance. Opium given in conſiderable quantity alone increaſed the tight-

neſs

nefs of the cheft, and aggravated the pulmonic affection; but the fame effect did not follow the ufe of it when combined with fquill, ipecacuanha, or antimony. Perfons of all temperaments, ages, and claffes, as well as of both fexes were indifcriminately affected.

Relapfes were frequent and differed little from the original attack. It frequently happened that feveral individuals of the fame family were ill of the difeafe at the fame time, but it *more frequently* occurred at intervals of ten days, or more. I cannot help attaching the idea of contagion to this diftemper.

The fatality of this complaint was but trifling, I loft only one patient, (a man aged 63,) out of nearly 200.

ARTICLE LXIX.

From Mr. J. C. MELHUISH, Tiverton.

AUGUST 18, 1803.

The Influenza firft appeared in two of my patients, one of which refided in this town, and the other about a mile fouth-eaft of Tiverton, on the 23d day of March laft. After having been very general about a month, it fubfided almoft immediately after the change of the wind from the eaft, (in which quarter it had almoft conftantly been from the time above-mentioned,) to the weft and fouth, and the fubfequent rain, without recurring in any fingle inftance.—It appeared to me as uniformly endemic, and in many cafes epidemic. I recollect the former Influenza, (fome years fince,) which feemed a compound difeafe of catarrh, and peripneumony, the firft rather predominating; in the late difeafe, (in my opinion) a compound difeafe alfo, of catarrh, peripneumonia notha, and fometimes inflammatory fore throat, the fecond was moft predomi-

dominant. An intermittent tendency, was alſo *very* obſervable in ſome inſtances, but it *never* continued ſo as to require the uſe of the bark.

I found the pneumonic affection in this diſeaſe infinitely leſs dangerous than when the peripneumonia notha is leſs frequent—for though three inſtances in this neighbourhood occurred, where two in each houſe died, yet theſe were old perſons, or of very bad ſtamina, and in a bad ſtate to meet the diſeaſe.

Upon the whole, I found it much leſs dangerous than from the ſeverity of the ſymptoms I had at firſt apprehended.

I had only two caſes in which I bled, in *one* of which the patient was accuſtomed to bleeding every ſpring, the *other* highly plethoric, but each recovered.

I always treated this diſeaſe exactly as the peripneumonia notha, except that opium, (at night,) which I have ſo often given with the greateſt ſucceſs in this diſeaſe, unfortunately had the contrary effect in the Influenza.

Previous to, or during the prevalence of the diſeaſe, I did not notice any epizootic complaint.

ARTICLE LXX.

From Dr. KINGLAKE, of Taunton.

JULY 4, 1803.

A catarrhal affection of unusual violence, has raged epidemically in this town, and neighbourhood. It occurred to me to see, and direct a well marked case of this influenzal malady, so early as the fifteenth of last January. It did not become remarkably prevalent until the latter end of February, and during the month of March. Its increasing frequency, and rapid propagation, then gave it its definite character and denomination.

It was most rife in the months of April, and May, when it seemed to have attained its acme, both with regard to violence, and extension. No case of the complaint has fallen under my professional care since the fourth instant, yet the disorder, though apparently verging on extermination, is not yet quite extinct. Even almost to the present day, it

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ſhews itſelf very characteriſtically, but ſo rarely, as to have loſt its epidemic title.

Its characteriſtic Symptoms.

Its moſt prevailing deſcription of ſymptoms was a ſenſe of diminiſhed temperature, denoted by tranſient chillineſs, occaſionally proceeding the length of violent and durable ſhivering, ſucceeded by febrile heat, cuticular dryneſs, hard, rapid, moderately full pulſe, inflammatory determination to the mucus membrane, inveſting the fauces, trachea, bronchial tubes, and noſtrils, inducing ſtrictured breathing, pain in one, or both ſides, ſometimes directly under the ſternum, acroſs the cheſt, or more particularly in the region of the heart, painful cough, mucus expectoration, diſcoloured and dry tongue, often accompanied with apthous eroſions, craving thirſt, high-coloured urine, and not unfrequently a total loſs of ſmell and taſte. The more urgent form of ſymptoms was a general aggravation of the preceding, with the addition of nauſea, aneurexia, bilious vomiting, and purging, icteric diſcoloration of the ſkin, laborious breathing, bloody expectoration, epiſtaxis, muttering delirium, and extreme depreſſion of mental energy.

The

The number and external character of these symptoms varied considerably in different individuals; but in no instance in my observation, was the catarrhal basis wanting to distinguish the peculiar nature of the disease: nor did an undeviating uniformity mark its course in members of the same family, though of nearly equal ages, and apparently, of similar constitutions. Inscrutable dissimilarity of temperament countervailed any assimilating influence which consanguinity, equality of age, and constitutional resemblance might exert, and appeared in corresponding diversity of features. It seems to have made a deeper, and more untractable impression on the male, than the female constitution.

It has not in my opinion been necessarily fatal in any instance, when unconnected with other diseases, and appropriately treated.

My experience happily disables me from making any estimate of its proportionate fatality, having in a considerable number of patients seen but one only who died, and in that solitary instance, dissolution was too

 nearly,

nearly, and irrefiftibly approaching at my firft vifit, to afford any chance of refcue.

No age, clafs, or conftitution, was exempt from its attack ; but it appeared to me to fall more conftantly on the adult, than an earlier age, and moft violently, on the old, the afthmatic, and the irritable temperament.

Females feemed to be more obnoxious to the difeafe, than males.

Its Mode of Cure.

The moft fuccefsful treatment was a clofe adherence to what is termed the antiphlogiftic plan, with refpect to diminifhed temperature, free ventilation, and copious dilution, with cold, flender liquids, in fmall portions, at fhort intervals. When the difeafe was feafonably checked by cooling management, no indication occurred for the employ of bleeding, whether general or local, emetics, purgatives, or opiates.

Sudorifics and blifters, under circumftances of fevere inflammatory pain, and determination to the lungs, proved highly falutary, and, in general, much fecurity from relapfe was afforded, either by the renewed, or protracted irritation of blifters.

The

The moſt appropriate diet was the lighteſt, and leaſt ſtimulant. Previouſly to the commencement of convaleſcence, the moſt ſuitable ſuſtenance was barley water, oat gruel, chicken broth, beef-tea, and at fartheſt, a ſlightly boiled egg; theſe were advantageouſly taken in ſmall quantities, at ſhort diſtances; they ſufficiently reſiſted the increaſe of direct debility, without hazarding its indirect production by undue excitement.

A cold temperature was highly gratifying and beneficial. From forty to forty-five of Fahrenheit's thermometer would have been deſirable; but the variable heat of the atmoſphere precluded the advantage of this uniform coolneſs. The thermometer often ſtood at about fifty in expoſed ſituations; but in the apartments of the ſick, no injunction or remonſtrance could prevent its frequently aſcending to ſixty and upwards, by ſhutting the windows and doors, or even kindling fire in the bed-room: whenever the latter indiſcretion was committed, the aggravated ſymptoms of the patients ſoon became ſufficiently evident to induce an anxious wiſh to return to

the compofing influence of a cooler temperature.

The difeafe ufually terminated in a gradual abatement of every febrile fymptom, particularly the removal of painful and oppreffive determination to the cheft, an equal diftribution of the circulating fluids, fteady uniformity of fenfual temperature, deepened cough, and copious expectoration of vifcid mucus. The recovery of fmell and tafte, efpecially the latter, were the laft, and often very late, in the arrear of convalefcence.

Relapfes were very frequent, even in defiance of fuitable precaution.

The fymptoms of relapfe were fimilar to thofe of the original attack, with the difference of being in general much lefs fevere.

The progrefs of convalefcence was, in moft inftances extremely flow, and tedious. It was ufually accompanied with an infuperably vexatious cough, and occafionally with abundant expectoration, and nafal difcharge of heavy, yellow, offenfive mucus. Under thefe circumftances, pulmonary confumption was formidably threatened, and in fome inftances,

ſtances, the incipient ſtage of that deſtructive malady, appears to have been actually entailed.

The treatment which proved beſt adapted to obviate ſerious conſequences, and to inſure a ſalutary iſſue, conſiſted in guardedly avoiding an abrupt return to a full ſtimulant diet, unduly heated apartments, and too much bodily exertion. A ſmall quantity of nutriment, at ſhort intervals, abſtinence from fermented liquors, tranquillity, and the uniform ſupport of a derivant degree of irritation on the cheſt, either by veſication or rubefacience, powerfully conduce to the moſt favourable termination.

Stomachic and tonic medicines were not often either neceſſary or admiſſible, as the return of appetite and vaſcular tone was, in general, foremoſt in convaleſcence, and the ſtimulant effects of agents employed in thoſe intentions, were contra-indicated by the morbid remains of pulmonic irritation.

Its Origin.

The influenzal epidemic did not in my obſervation either diſtinctly induce, or mingle its character with other diſorders, except the

modification which it received from an asthmatic, tubercular, or any other diseased state of the lungs; and in this complicated affection, could be recognized no more than additional violence and obstinacy, in the superadded distemper. On some occasions, indeed, an icteric hue tinged the skin, and the various secreted fluids; but this appeared to arise from a subordinate derangement of the hepatic function, and did not essentially interfere with the specific influence of the reigning malady.

The contagious power of the disease appeared to me to be unequivocally decisive, its propagation being, in most instances, distinctly traceable by personal intercourse.

In populous associations, where personal intercourse was unremittedly continued, the disease became general at the same time; or at least occurred in rapid succession.

This simultaneous prevalence of the disease was strikingly exemplified in large families; indeed so universal was its reign in some instances, as to make the private dwelling assume the dreary appearance of a temporary hospital.

My

My obſervations have been chiefly confined to an extenſive vale, rather of a ſandy ſoil, moderately wooded, plentifully watered, and well drained; expoſed to the eaſt, and weſt winds, and ſheltered from thoſe of the north, and ſouth.

The diſorder occurred in a deſultory manner in this neighbourhood, prior to either its metropolitan or provincial prevalence having eſtabliſhed its epidemic character. From its firſt appearance in this town and vicinity, it indeed continued to ſpread; but the courſe of its perſonal propagation was not ſo evident, as when its increaſing diffuſion had multiplied the ſources and channels of its contagious influence.

Inſtances abound of whole families becoming infected in conſequence of a diſtempered individual, either inmating with, or tranſiently viſiting them.

For many months previouſly to this epidemic, the very variable courſe of atmoſpheric temperature was notorious to common obſervation. The unſteadineſs would indeed at times run through a vaſt range of heat. An interval of twenty-four hours would often preſent unſeaſon-

ſeaſonable extremes, from the freezing point to fifty of Fahrenheit's thermometer. The hurtful violence which theſe contraſted ſtates neceſſarily inflicted on the ſentient and irritative powers of the ſyſtem, was exaſperated by the rapidity of tranſition from the one to the other.

This very variable temperature affords a cauſe fully commenſurate to the effects which have ariſen in the motive powers of health, and which have been characteriſed in the epidemic catarrh of the ſeaſon. Irregular temperature ſoon induces inequality in the diſtribution of the circulating fluids, which operating as a morbid excitement on the ſyſtem, produces the febrile ſenſations of diſtempered cold and heat, of relative deficiency and plenitude; with ſuch viſceral determination as the joint influence of aſſociative and organic ſuſceptibility may favour.

The motive laws of the animal œconomy have ſo intimate a connection between the cuticular ſurface, and the mucus membrane inveſting the bronchial tubes, trachea, &c. as to induce the moſt prompt participation in each others affection. Hence the diſeaſed impreſſion

preffion made on the fkin in irregular temperature, is but too apt to be precipitated, together with the confequent commotion of the fyftem, on the lungs, or rather its aerial membrane. The local eftablifhment, the difeafe here obtains, will foon fpecifically vitiate vital action, and caufe it to evolve a halitus, or motive power, capable of impreffing its own peculiar nature, in fuitable circumftances, of organic fufceptibility. In this mode catarrhal affection ufually originates, which becomes more or lefs extenfive in proportion as the feverity of the difeafe generates, concentrates, and diffufes its contagious power.

It is difficult to conceive that any atmofpheric fource of contagion can be fufficiently extenfive to give effect to an epidemic difeafe. Before this could happen, the conftituent principles of refpirable air muft be decompofed, which would probably put an inftant period to every defcription of animal life. Temperature is the only condition of the atmofphere capable of general influence. Its extraneous matter, however noxious, is infulated, and can act but partially. Animal action is neceffary to endue it with fpecific,

or contagious power, and perſonal intercourſe is requiſite to its propagation. The hiſtory of the plague, and every variety of epidemic diſeaſe ſufficiently evinces, that in whatever phyſical circumſtances theſe diſtempers individually originate, they owe their diſſemination to the impreſſive power of perſonal contagion.

The direction of the wind does not appear to have much influenced the extenſion of the diſeaſe. The contagious power has required the application of its undiminiſhed force to become efficient. When reduced by aerial dilution and diffuſion, it has been too deficient in requiſite energy to excite the epidemic affection. No ſatisfactory proof has occurred in my obſervation of the atmoſphere having been the general vehicle of contagion, while its perſonal diſtribution has been notoriouſly obvious.

My recollection of the Influenza which raged in the year 1782, warrants me in ſaying that it bore a very near reſemblance to the late epidemic.

No epizootic complaint was remarkably prevalent in this neighbourhood previouſly to the occurrence of the late Influenza.

The

The ample experience afforded by the frequent recurrence of epidemic catarrh, has eſtabliſhed the important fact, that the diſeaſe has been invariably of an inflammatory nature, and that it will always be appropriately, and probably ſucceſsfully, combated by cooling, and anti-ſtimulant treatment.

An effectual prevention of this malady is leſs likely to be obtained, than a ſecure repreſſion of its violence, by an early inſtitution of the ſuitable means of cure.

Whether fumigation with acids, or any other ſubſtances, can deſtroy catarrhal contagion by inducing chemical changes in the arrangement of the morbid power, is yet too doubtful to be implicitly relied on, and until the queſtion be decided, its adoption ſhould neither ſuperſede the employ of the certain prevention, by avoiding perſonal intercourſe with the affected when practicable, nor the alleviating utility of an abſtemious and anti-inflammant regimen, both before and after the attack of the diſeaſe.

Your queſtions are well adapted to obtain the moſt uſeful ſcientific and practical intelligence on the nature and cure of the late, as

well

well as other kindred epidemic diſtempers. Much diverſity of opinion will probably be diſcovered on this intereſting inquiry, particularly on perſonal and aerial contagion, yet it may be preſumed there will be leading agreement and reſemblance, ſufficient to reſt the cauſe of truth on the clear induction of concurrent facts.

ARTICLE LXXI.

From WILLIAM WOOLCOMBE, M. D.
Plymouth.

Query 1. The epidemic catarrh, usually called Influenza.

2. On the 2d of March, in a family consisting of eight persons, all of whom had the disease successively in the space of a few days. The first case at the Public Dispensary did not occur until the 18th of the same month, by which time the disease was very generally prevalent in the town.

3. During the last ten days of March.

4. The last instance of attack, which I met with, occurred on the 12th of May, but very few cases had occurred during the preceding part of this month.

5. Superadded to the more common febrile and catarrhal symptoms, there subsisted an extreme degree of debility and languor, apparently very disproportionate to the other symp-

ſymptoms; a conſiderable ſoreneſs of the muſcles, increaſed by ſlight preſſure, was alſo a frequent and troubleſome ſymptom.

6. The ſymptoms varied conſiderably in number and degree in different individuals. No prevailing ſimilarity of ſymptoms appeared to me to ſubſiſt in the relations ſtated in this query.

7, 8. The very few inſtances of death, which I could attribute to it, occurred in perſons of advanced age, previouſly liable to pulmonary affection, particularly of the aſthmatic kind.

Of forty patients admitted at the Diſpenſary one died.

9. Children appeared to be leſs obnoxious to the diſeaſe than adults, and when ſeized, to have the complaint more favourably.

11, 12. The effects of bleeding, general or local, came not within my obſervation. Mild emetics were of ſervice at the commencement of the complaint, and occaſionally during its progreſs; but from the inordinate and indiſcriminate uſe of James's powder, I have reaſon to think, in many inſtances, that the leading ſymptoms of the diſeaſe were aggravated,

vated, and its duration protracted. Laxatives, ſudorifics, anodynes, were occaſionally uſeful, but theſe remedies ſeemed to me to have leſs effect in relieving the particular ſymptoms againſt which they were directed, than might have been expected either from the degree of thoſe ſymptoms, or from the uſual effects of ſuch remedies, employed on account of analogous ſymptoms in other diſeaſes.

13. In mild caſes little variation of diet ſeemed neceſſary, and in thoſe of a ſeverer kind, there generally ſubſiſted a very ſtrong objection to ſuſtenance of every ſort.

18. Recovery was very far from rapid.

19. In thoſe perſons in whom the ſymptoms of the diſeaſe had occurred only in a ſlight degree, conſiderable laſſitude and languor long continued; but where the ſymptoms had at firſt been more ſevere, the conſequent debility and languor were often protracted to a conſiderable ſpace of time.

21. Pneumonic inflammation was the diſorder, which appeared moſt frequently in combination, and from which, almoſt excluſively, was danger to be apprehended, with the exceptions ſtated 7, 8.

 22. The

22. The evidence detailed in the hiftories of former epidemics of this kind appears to me to preponderate in favour of the opinion, which attributes the propagation of this diforder to contagion. Nothing has occurred in the courfe of my own obfervation on the progrefs of the late epidemic to induce me to abandon this opinion, which has received confirmation from the apparent introduction and progrefs of the difeafe in particular families. In the family mentioned in the anfwer to query 2, the difeafe appeared many days before it was prevalent, or, to the beft of my information, known in this town; and proceeded to attack in fucceffion every individual of the family.—It is difficult to conceive that every one of eight perfons compofing one family, fhould be more difpofed than the reft of his neighbours, to be acted upon by an influence, to which all were in common expofed; at the fame time, I confefs myfelf unable to fhow by what means the fuppofed contagion was introduced into this family, in the mafter of which its influence was firft apparent.

24. Generally perſons in the ſame houſe were affected in ſhort ſucceſſion to each other; yet to this ſtrong exceptions certainly occurred, ſometimes ſeveral being affected at the ſame time, and ſometimes certain individuals eſcaping the diſorder when moſt prevalent in the houſe, and yet having it at a ſubſequent period.

25. In the town and neighbourhood of Plymouth.

27. The diſeaſe I am inclined to believe prevailed in the populous towns of Plymouth and Dock, before it became general in the country around, or in the villages, in the vicinity; but on this point I have not ſufficient information to ſpeak with confidence.

29. The progreſs of the diſeaſe was weſtward; but its appearance, in particular places, did not correſpond uniformly to this direction. The wind, ſome time previouſly to its appearance, and during its prevalence, blew very generally from the eaſt.

During the prevalence of this epidemic, I obſerved, with ſome ſurpriſe, that the complaints of conſumptive patients, in the vari-

ous ſtages of phthiſis were not apparently affected by it, in the ſlighteſt degree. Nor has phthiſis been more frequent ſince. I have met with one inſtance only of this diſeaſe originating in the Influenza.

ARTICLE LXXII.

From Mr. HARPER, of Gofport.

2. About the 10th of March.

4. Laft patient about the 30th of March.

6. Did not vary in the fame family, equal age, fimilar conftitutions, and different fexes, but when combined with peculiarity of conftitution.

7. No.

10. No obfervable difference.

11. No other medicines neceffary than mild diaphoretics. None given, but mift. falin. with fpt. æther nitrof.

12. No occafion to bleed, either general or local, to give emetics, purgatives, opiates, or ufe blifters.

14. Moderately warm.

16. Sometimes a relapfe—one fo late as April 11.

17. Similar fymptoms, yielding to the fame mild remedies.

18. No—quite the reverfe
19. Debilitated
20. None neceffary

} Several at this time (June) not recovered from its effects.

21. The diſeaſes at this time fatal, were peripneumonia notha, and phthiſis.

Several caſes of catarrh previous, during, and after.

The peripneumonia more ſevere than uſual, perhaps, aggravated by the epidemic; but the weather at the ſame time peculiarly unfavourable.

22. Whole families affected.

23. In a ſchool of about 80, only four applied for relief.

24. In ſucceſſion, at a few days interval.

27. Places in the neighbourhood before and after, much more ſeverely.

28. From the 12th of February, (except the 20th north) to 1ſt March, wind weſt to ſouth-weſt.

From 1ſt March to 14th north-weſt to north-eaſt and eaſt, 14th and 15th weſt, 16th eaſt, 17th to 21ſt ſouth-weſt, and weſt, then eaſterly to 25th. Afterwards variable.

29. Not followed the direction of the wind, but affected by the northerly winds.

31. Have not heard of any diſeaſe in any animals, ſince September and October, when a diſeaſe in cats.

STATE of the Thermometer, Barometer, Wind and Weather at Gofport, in the County of Hants, taken at Ten o'Clock in the Morning of each Day 1803.

FEBRUARY.

Day	Ther.	Barom.	Wind and Weather.
1	38	30,35	N. Tolerably fine.
2	40	30,1	N. W. Cloudy, afternoon fine.
3	37	29,6	N. W. Fine at times, but fome wind.
4	32	30,18	N. E. Very fine.
5	32	30,1	E. Very fine, fome fog in the morning.
6	37	29,5	W. Some little fnow in the night, rather inclined to rain with wind. Afternoon wind north.
7	35	29,54	N. Some wind, a little fnow in the night and evening
8	32	30,	N. E. Cloudy, fnow early in the morning.
9	35	30,2	N. W. Fine.
10	36	30,47	N. E. Very fine.
11	32	30,53	N. E. Very fine.
12	33	30,5	N. E. Foggy at nine, A. M. Thermometer 28.
13	44	30,04	W. Rainy.
14	40	29,87	W. Some froft in the night. Some rain early in the morning.
15	44	29,55	W. Some wind, cloudy. Some rain.
16	44	29,48	W. Some wind, fine at times.
17	44	29,66	W. Windy and cloudy, rain at night.
18	44	29,6	W. tolerably fine and calm.
19	44	29,77	W. Afterwards fouth-weft, very fine, then rain and windy.
20	45	29,5	N. Cloudy.
21	40	29,74	W. Rainy.
22	40	30,14	W. Very fine.
23	45	30,3	S. W. Very fine. (Abfent from home, taken by my affiftant.)
24	47	29,8	S.
25	45	30,3	W. S. W.
26	49	30,4	S. S. W. Cloudy until noon, then fine.
27	48	30,3	W. Fine, but high wind.
28	46	30,2	S. W.

Comparative Statement of Burials in the Parifh of Alverftoke and Borough of Gofport from 1800 to 1803.

Burial Places common to both,		1800*.	1801*.	1802.	1803.
At the Parifh Church	February	13	14	9	6
At the Town Chapel	February	29	19	14	11
Exclufive of Naval and Military Hofpitals.	Total	42	33	23	17

* N. B. As the population of the town, &c. increafes in war, and diminifhes in peace, it may be neceffary to bear in mind that in 1800 and part of 1801, we were in a ftate of war.

MARCH.

Day.	Ther.	Barom.	Wind and Weather.
1	51	30,1	N. W. } Absent from home.
2	48	30,	N. W. }
3	37	29,9	N. W. Sometimes east, wind, and some showers of snow and sleet.
4	37	29,9	N. E. Tolerably fine, but windy.
5	40	30,	N. N. W. Very fine.
6	44	30,07	N. N. E. Fine.
7	37	30,13	N. E. Windy and cloudy.
8	40	30,1	N. E. Windy and cloudy, then finer and less wind, much rain at night.
9	35	30,03	N. E. Cloudy.
10	34	30,04	N. E. Cloudy.
11	37	30,24	N. windy, sometimes fine, some little snow.
12	35	30,46	N. Fine and clear.
13	35	30,46	N. W. Very fine.
14	47	30,37	W. Fine at times, mild, spots of clouds.
15	45	29,7	W. Cloudy and rainy.
16	43	29,93	N. Very fine.
17	43	29,93	S. W. Cloudy.
18	[illegible]6	30,14	S. W. Inclined to rain.
19	47	30,26	W. Small rain, fine afternoon.
20	50	30,16	W. Small rain.
21	53	30,24	E. Very fine.
22	53	30,14	E. Very fine.
23	55	30,16	E. Very fine.
24	57	30,26	E. Cloudy, then fine.
25	55	30,12	E. Cloudy.
26	57	30,06	W. Afterward variable, very fine.
27	60	30,2	S. E. Afterward variable, very fine.
28	54	30,15	W. Variable, very fine.
29	56	30,05	E. Variable, very fine.
30	56	30,11	W. Variable, very fine.
31	54	30,2	Wind variable, very fine, fog in the evening.

Comparative Statement of Burials in the Parish of Alverstoke and Borough of Gosport from 1800 to 1803.

Burials Places common to both,		1800*.	1801*.	1802.	1803.
At the Parish Church	March	16	13	12	15
At the Town Chapel	March	44	32	18	19
Exclusive of Naval and Military Hospitals	Total	60	45	30	34

APRIL.

Day.	Ther.	Barom.	Wind and Weather.
1	53	30,07	E. Foggy in the morning, very fine.
2	53	29,73	S. Cloudy.
3	53	29,6	Variable from S. to W. then to easterly, some rain in the night, then fine.
4	50	29,8	S. Some rain in the night, very fine, a little rain in the evening.
5	52	30,12	S. W. Windy, but fine.
6	56	30,2	S. E. Very fine.
7	54	29,72	E. Very fine, rain in the evening.
8	53	29,72	S. E. Rainy, fine afterwards.
9	51	29,92	S. E. Rain in the morning, cloudy, some rain in the afternoon and night.
10	55	30,2	W. Cloudy morning, then fine.
11	59	30,44	N. E. Very fine.
12	55	30,5	N. E. Very fine, some wind.
13	57	30,5	E. Very fine.
14	62	30,47	S. E. Very fine.
15	62	30,34	E. Very fine.
16	57	30,07	E. Wind changed to W. in the afternoon, very fine.
17	55	30,	W. Cloudy, high wind at night.
18	48	30,	W. Rainy and windy at times, some hail in the morning.
19	55	29,75	W. Storm of wind in the night, windy and cloudy, with showers.
20	47	29,74	W. High wind and cloudy, with showers at times.
21	53	29,24	S. W. High wind and rain at times.
22	52	29,42	W. Fine morning, then cloudy, much wind.
23	51	29,63	W. Squally at times, some hail, wind, and showers at times.
24	44	29,8	W. Fine morning, then showery, not much wind.
25	55	30,04	W. Very fine morning, then cloudy.
26	48	30,04	W. Very fine.
27	47	29,7	N. W. Fine, but cloudy N. E. afterward squalls of wind and rain, until the evening, wind S.
28	46	30,	N. Cloudy and windy, afterward fine at times.
29	51	30,15	N. Cloudy, but no wind.
30	54	30,03	W. Very fine.

Comparative Statement of Burials in the Parish of Alverstoke and Borough of Gosport from 1800 to 1803.

		1800*.	1801*.	1802.	1803.
Burial Places common to both,					
At the Parish Church,	April	15	14	10	18
At the Town Chapel,	April	34	37	11	12
Exclusive of Naval and Military Hospitals - -	Total	49	51	21	30

Population of Parish and Town.

			Population Act. March 1801.	Defence Act. July 1803.
Alverstoke Parish	Liberty part,	- -	2980 -	- 2158
	Gosport town,	- -	8315 -	- 7049
Exclusive of those serving in the Army, Navy, or Militia		Total	11295 -	- 9207

ARTICLE LXXIII.

From Mr. ROWE, Portſea.

JULY 1803.

CASE I.

In the evening of March 18th, was deſired to attend a female about 20 years of age. She complained of ſudden chillings, which was ſucceeded by faintneſs, giddineſs, throbbing pains in the head, fluſhes in the jaw, reſtleſſneſs, wearineſs, and depreſſion of ſpirits. Ordered her ½ dram ſal nitri every hour and a half, diſſolved in a cup of barley water, which ſhe drank copiouſly of; her extremities were bathed in warm water. When I viſited her in the morning of the 19th, found ſhe had perſpired very much through the night, the pain in the head was much relieved, the fluſhes in the face, and the wearineſs was gone off, and ſhe was in every reſpect much better. She had now taken about ten drams of nitre, and continued to take

$\frac{1}{2}$ dram every 3d or 4th hour. 20th, Said ſhe was now quite comfortable, but rather coſtive, diſcontinued the uſe of the nitre, and ordered her to take one ounce of vitriolated natron diſſolved in a cup of warm water gruel, which operated very well. On the 21ſt all the ſymptoms were removed, leaving a debility which was removed by a nutritious diet, and moderate exerciſe. The maſter and miſtreſs of this girl, who reſided in the ſame houſe, complained of a ſore throat, and ſlight fever at the ſame period the girl was indiſpoſed, which was removed by drinking freely of thin diluting drinks, a ſlender diet, and the partial uſe of the warm bath.

CASE II.

Was that of a female aged 30, whoſe ſymptoms were nearly the ſame as caſe 1ſt, except that ſhe complained of a cough, dyſpnœa, and oppreſſion at the breaſt, which was immediately removed on the application of a bliſter.

Several other caſes I have met with which I treated in a ſimilar manner. I have generally

rally found the good effects of *sal nitri* freely administered in thin diluting drinks. A light diet, frequent bathing the extremities in warm water, and the application of *blisters*, where the dyspnœa and oppression at the breast has been great. I have invariably observed the antiphlogistic plan, several *males* who were affected slightly, I have found a dose of vitriolated natron remove the disease; some cases I met with which terminated on the 3d or 4th day, others not till the 8th or 9th day. I have never employed *bleeding* or *emetics*. I have generally found where one part of a family had the disease in any considerable degree, some of the other part of the family, complained of slight fever, sore throat, cough, or pains in the head. I have generally found males to be the greatest proportion that were affected. I have not met with any relapses, nor have I found any particular treatment required in the convalescent state; I have generally recommended a nutritious diet, with moderate exercise. I have generally found this disease attack persons from the age of 20 to 35, and from that to

46, or

46, or 47. It made its appearance in this neighbourhood, and within 10 or 12 miles of it, nearly at one and the ſame time. And to ſome of the inhabitants of this town, it has proved fatal.

ARTICLE LXXIV.

From Mr. WALLER, of Gosport.

1. None excepting the Influenza, scarlatina, and opthalmia.

2. About the beginning of March.

3. During the month of March.

4. About the latter end of May.

5. The cough and peripneumonia.

6. Varied but little, except in degree in those of the same family.

7. Not one fatal case.

9. No ages or classes more particularly affected, excepting such as prone to peripneumonic affections.

10. More of females.

11. Know not that any particular plan of treatment subdued it more than another; neutral salines with antimonials chiefly employed.

12. Bleeding and emetics relieved for a season, and I think rather tended to shorten the disease. Bleeding used in cases more strongly

ſtrongly marked with inflammation; and emetics, if early in the diſeaſe, and marks of pyrexia.

13. Diluent or light diet.

14. Recommended to be much in bed.

15. Gradual relief of ſymptoms, but tedious cough.

16. to 20. Relapſes did occur, but were leſs ſevere.

21. Phthiſical and peripneumonic affections blended with this diſeaſe were ſevere, and here one fatal caſe occurred in a patient upwards of 60 years, and impaired through hard ſervice.

22. Think it was contagious from its general influence; ſeveral in a family, if not the whole, more or leſs affected. Yet many perſons I believe eſcaped it.

24. In ſucceſſion, but no certain data.

27. In my practice the country around us was infected later than the town.

31. If this means any affection of the animal tribe, have heard that many cows have died this ſpring.

July 2, 1803.

ARTICLE LXXV.

From JOHN LIND, M.D. Haslar.

AUGUST 17, 1803.

In the military Hospital near Gosport, I learn from Dr. Bowles, whose observations on it Dr. Pearson has published, the Influenza was severe. In Haslar Hospital it combined with some cases of typhus, but was otherwise slight and difficultly traced.

ARTICLE LXXVI.

From Reigate.

1. The Influenza, or epidemical catarrh.

2. February 15th.

3. Throughout March.

4. In May.

5. Fever and peripneumony.

6. Thoſe who enjoyed the beſt health previous to the diſeaſe were the leaſt affected by it.

7. No.

8. In this diſtrict, not one in 200.

9. The aged, the intemperate. Thoſe who had weak lungs, or were by their employment expoſed to the night air, or who lived hard, and were barely clothed.

10. I think females, probably from their being leſs expoſed.

11. The fever, in moſt inſtances, being analogous to the typhus, I bled very few; but cleanſed the primæ viæ of bilious ſordes with an

an emetic, and frequently adminiftered the following cathartic pills 12 or 18 hours after. R. calomel. ppt. gr. iv. pulv. antimon. l. gr. ij. conf. arom. q. f. ut f. pill. I proceeded in the cure with fmall dofes of antimonials, faline and camphorated medicines. Lac amygd. aq. ammon. acet. &c. Blifters had a good effect.

12. Anfwered in the foregoing.

13. The light, nutritious, and mucilaginous, taken in fmall quantities, at fhort intervals.

14. Moderately warm, and dry, airy fituations.

15. Ceffation of febrile fymptoms. A fediment in the urine, return of appetite, and reft, free breathing, and expectoration.

16. Much depended on the patients taking care, particularly to avoid the night air.

17. I think more fevere, and the cough more violent.

18. No.

19. Very weak and debilitated. Some complained of rheumatic affections; others of a continuance of the cough, but I know of no inftance of phthifis pulmonalis fucceeding it.

20. Roborant and pectoral medicines, as g. myrrhæ, acid. vitriol. dil. or infus. rad. colombæ, &c.

21. In many cases bilious complaints.

22. Instances occurred of strong young people, as farmers' servants, &c. escaping it, though living in families wherein it prevailed.

23. In a workhouse in this neighbourhood (under my care) wherein there are 200 people employed in a blanket manufactory, wherein oil is used, no decided instance of the Influenza occurred.

24. Generally at the same time, or at short intervals.

25. The soil chiefly sandy.

26. Reigate, and the neighbourhood thereof, is screened from the north and east winds by lofty hills.

27. It was discovered here, soon after its appearance in London.

28. The days were rather warm for the season, but the nights unusually cold.

29. I cannot positively answer the first part of this question, but think it may be communicated.

I ob-

I obſerved that in lonely ſituations where there was but little intercourſe with other places, it was by no means ſo general as in towns, and villages.

30. Analogous, except in defluxions towards the head leſs general.

31. On inquiry amongſt people who have large ſtocks of cattle, I do not hear that there was.

ARTICLE LXXVII.

From W. VAUGHAN, M.D. Rocheſter.

1. The Influenza appeared firſt at Brompton in the evening of the 25th of February, when it ſeized twenty-eight of Mr. Hulet's ſcholars. Out of this number ſixteen were immediately ſent home, and to the twelve who remained an emetic was adminiſtered. There were twelve others, whom the diſeaſe ſpared on the 25th, and who afterwards eſcaped it altogether.

Mr. and Mrs. Hulet cannot yet learn, that any adjacent place was previouſly attacked by this Influenza. And it is worthy of remark, that Mr. Stone's ſchool, which is ſituated in the next ſtreet, had not a ſingle ſcholar affected with it.

Mr. Hulet's ſchool lies open to the north.

The twelve ſcholars, who had been vomited, and who drank plentifully during the night of weak wine-whey, were quite well by

by the next morning; but the ſixteen, who had been conveyed home, were all of them worſe. And indeed, the leaſt attentive obſervers agree in this, that the Influenza, if left to itſelf, came to its height on the ſecond day.

Such are the more remarkable circumſtances, as they ſeem to me, of Mr. Hulet's ſchool, of which the complement is about forty ſcholars.

2. Of the Influenza, at Rocheſter, I heard nothing till the 28th of February; and as ſoon as I found, that the patients complained of coldneſs and ſhuddering, I ſuſpected a fever of ſome regular type, and endeavoured forthwith to learn it. This I did eaſily: an evening paroxyſm in general began the diſeaſe, and was ſucceeded by another at noon the next day:—two paroxyſms in one period, and the ſecond the ſeverer paroxyſm; agreeably to the obſervation of Mr. and Mrs. Hulet, that the ſixteen ſcholars who were ſent home, and for whom nothing was done, were worſe on the ſecond day. In the ſecond paroxyſm, the diſeaſe ſeemed as if come to its acmé: and the fourth paroxyſm, which

correſponded with the ſecond, ended with ſigns of criſis.

From this time, the type of the fever ſeemed changed for that of a *ſimple* tertian; the *even* days remaining calm, and the *odd* days being diſturbed by only one ſlight fit.

3. But how ſoon was the Influenza diſcernible? Its approach was marked by ſymptoms of debility in all the functions, but in thoſe more eſpecially which ſome modern phyſiologiſts call external, or relative. (*Phyſiologie par* A. RICHERAND, *Prolegom.* LXXIV.) Pains of the head, and of the limbs, and of the cheſt, were conſtantly preſent in the beginning, and there was ſometimes, among the precurſory ſigns, a moſt diſtreſſing pain near the upper orifice of the ſtomach.

Theſe, in different degrees, happening ſuddenly, and, as it were, without any evident cauſe, but accompanied with more or leſs of catarrh, and uſhering in a horror about ſix o'clock in the evening, ſeemed to me to conſtitute the Influenza.

4. If the epidemics common to the ſeaſon were more frequent, by conſequence of the low temperature of the air, and the long con-

tinuance

tinuance of a ſharp wind from the eaſt and the north-eaſt, they were ſo hybridized with the new one, ſo approximated to it, ſo aſſimilated with it, as, in moſt caſes, not to admit of the remedies otherwiſe preſcribed in them.

Pneumonia was, certainly, no part of this Influenza: in ſome the pain of the cheſt was not felt till the ſecond paroxyſm, and was even then leſs urgent than that of the head; in others the pain of the cheſt was not conſtant; in none did it bear any proportion to the cough; and in all, perhaps, where ſome form of pneumonia was ſuſpected, it was rather perſonated. Far be it from me to expreſs a doubt, that this Influenza was ever complicated with a true peripneumony. I do but aſſert my own experience, limited indeed as it is.

5. During the prevalence of this epidemic, I recollect two only, who died: one of pneumonia under which ſhe had laboured for ſeveral years in ſucceſſion, another of pneumonia ſupervening on an habitual aſthma.

6. It ſeems now to be a queſtion of great moment, whether this Influenza was contagious?

gious? My opinion is, that it was not contagious: and this I infer, 1. not only from what is already ſtated reſpecting Mr. Hulet's ſchool, but alſo from this, that Mr. Hulet's child did not infect its nurſe:—2. from ſeveral in general falling ill at the ſame time, in the ſame houſe; or if falling ill one after another, doing ſo without the poſſibility of having caught it from thoſe previouſly affected:—3. from its not ſparing perſons with iſſues, bliſters, &c.—4. from reaſoning by analogy: for, in the firſt place, although ſome eſcape every contagion, (1 in about 3 eſcape the contagion of the jail fever,) the proportion that did not ſuffer the Influenza was greater than it could have been, if contagion had actually been diffuſed or diſſolved in the atmoſphere; and, in the next place, if the ſuddenneſs of the weakneſs ſeemed to countenance the ſuppoſition of a contagion, the ſuddenneſs of the action was inconſiſtent with what we know of other contagions: for they, all of them, produce "a diſpoſition to take on the morbid action," which diſpoſition is of a certain duration, according to the law of the ſpecific poiſon.

7. No

7. No epizootic diſeaſe has prevailed here, or in the neighbourhood, during the laſt twelve months.

8. As I ſaw no reaſon to believe the Influenza to be a contagious diſeaſe, ſo I was not concerned in conjuring up anticontagious agents. Ablution with water and with vinegar, I ordered every where; and, as impure air, independent of contagion, debilitates, I took care not only that my patients ſhould have a conſtant ſupply of freſh cool air, but alſo that the unneceſſary abſtraction of oxygenous gas from the air of their apartments, by any means whatſoever, ſhould, as much as poſſible, be prevented.

However, accuſtomed to look upon every fever with a fear that it is contagious, I was upon the alert; and if the Influenza had ſpread any where, as from a centre, it would have been eaſy to ſtop its progreſs by ſeparating the ſick, and by a proper uſe of the oxymuriatic acid.

I endeavoured to keep the temperature of the air in ſick rooms a little below, never above, 60° of Fahrenheit.

9. The

9. The Influenza, when unconnected with any other disease, ran its short course without danger. To lie abed and promote perspiration by the gentlest means, to keep the bowels soluble, and to avoid all causes of irritation, was all that prudence dictated to be done. Whey made with orange-juice was very grateful, and I ordered it frequently: others recommended pulvis antimonialis, which alone, and sometimes joined to calomel, had a very good effect.

10. Although I advised the antiphlogistic regimen, yet even when pneumonia was present, in the case alluded to in No. 5. I did not venture to direct venesection: for I saw the blood that had been drawn from this very weak, very irritable woman; and its appearance certainly did not justify the drawing away of more. Pleurisies, which did not bear repeated venesection, were long since observed by the diligent commentator on BOERHAAVE (*Comment in Aph.* 1412). The learned DE HAEN and the judicious Mr. JOHN HUNTER were aware that venesection did not suit every inflammation. And the time

time will probably come, and that ſoon too, when not only the nature of the inflammation, but alſo its ſtage, muſt be conſidered, before we order blood to be taken away.

11. In the very beginning of the Influenza, with a view to cut it ſhort, an emetic was, certainly, proper: but afterwards, and eſpecially when the fever was "caput petens," or the lungs were much affected, it would, perhaps, have been improper. A paper on this ſubject by DR. THOMSON of Montroſe is in the Edin. Med. Eſſays and Obſervations, Vol. IV.—How vomiting acts in cutting ſhort any epidemic, whether by exterminating a poiſon before it has had time enough to produce its effects, or whether by deſtroying the incipient effect, i. e. the diſpoſition, which is always prior to the action, I do not pretend to determine.

Where purges were indicated, I preferred magneſia vitriolata: and where the bowels were very inactive, or there was reaſon to ſuſpect a coacervation of fœces, I ordered calomel and an enema containing an ounce, more or leſs, of natron vitriolatum, both to be repeated *è re nata*.

12. With

12. With reſpect to diet, ſo inconſiderable was the duration of the diſeaſe, that as initia morborum famem deſiderant, total abſtinence was rather enjoined.

13. For a pain of the ſide I preſcribed a bliſter, which in general removed, or, at leaſt, relieved the pain. But always, whenever the lungs were affected, I limited the uſe of liquids, as well to diminiſh the afflux of blood to that organ, as to prevent the ſtimulus of diſtention.

14. If the head-ach was violent, a pediluvium, raiſing the mercury to 96°, and the repeated exhibition of magneſia vitriolata, with ſmall doſes of antimonium tartariſatum, afforded very ſpeedy relief. Did the former accelerate the motion of the blood through the brain, while the latter diminiſhed its quantity, by making a derivation to the kidneys and bladder?

15. The cough yielded to mucilages with nitre, to decoctum hordei compoſitum, to the ſteam of hot water, &c. ſquills, ammoniacum, ammonia, &c. ſeemed to me to be contra-indicated by the fever.

16. After the fever, the cough and watchfulneſs were removed by pillula ſtyracis, tinctura opii camphorata, a diet rather ſtrengthening than heating, and, above all, a change of air; in a word, a change of place, when it could be undertaken without diſturbing the patient's mind, proved the beſt reſtorative.

17. And, now, I will add, by way of ſupplement, a ſhort account of the diſeaſes, which I have obſerved to follow the Influenza, without endeavouring in the leaſt to ſhow their connection with it.

Catarrh and pneumonia have ever ſince occurred ſporadically, as have likewiſe cynanche tonſillaris, cynanche pharyngea, and cynanche parotidea.

From about the beginning of June till the middle of July, an exanthematous fever prevailed, and was evidently contagious, although I have not been able to learn that it attacked any, except thoſe whom the Influenza ſpared. Some called it a ſcarlet fever: but a ſcarlet fever it was not; for there was no florid redneſs of the ſkin, nor any deſquamation of the cuticle.

Rocheſter, Sept. 5, 1803.

ARTICLE LXXVIII.

From Mr. HODSON, Lewes.

SEPT. 8, 1803.

In anſwer to your letter reſpecting the Influenza, I have to inform you that it was very prevalent in this town and neighbourhood in March laſt. From the great reſemblance which the diſeaſe in queſtion had to a common catarrh, I cannot take upon me to ſay exactly when it firſt made its appearance here or when it ceaſed; it was however at its utmoſt height about the middle of March, and I believe firſt appeared in the preceding month, and diſappeared in April. We had heard of its prevailing in London, previous to its appearance here. The diſeaſe in general, as I have already ſaid, very much reſembled a common cold; in thoſe caſes which were more ſevere than ordinary, a great depreſſion of ſtrength generally took place more ſuddenly than might have been expected

expected from the degree of fever, and even in milder cafes, languor and debility fo generally prevailed as to become a very ftriking feature in the difeafe. I met with two or three cafes in which the pulfe was remarkably flow. One was in a robuft lad about 18, in whom the common fymptoms of the difeafe were very clearly marked: I faw him foon after the commencement of the attack, and found his pulfe only 40 in a minute; he however very foon got well, under fimple treatment. With regard to the remedies, if much pain in the head prevailed at the commencement of the attack, which frequently happened to a great degree, an emetic was of great fervice. In ordinary cafes, it was fufficient to keep the patient in bed for the firft day or two under the influence of antimonials, and the aq. amm. acet. or common faline mixture, taking care, however, not to carry the diaphoretic effect to too great an extent. In thofe cafes where the cough was very troublefome, I gave mucilaginous and demulfcent medicines, with the occafional ufe of opiates, which I found very ufeful. I met

with no caſe in which I judged it proper to bleed, but frequently had recourſe to bliſters on the cheſt, with good effect. When the cough continued troubleſome, after the fever had pretty well ſubſided, as was frequently the caſe, the common ſquill pill of the diſpenſatory appeared to me to be of great ſervice. With a view to remove the debility which ſo commonly prevailed during the convaleſcent ſtate, I generally gave the infuſ. gentian. c. or quaſſia, or inf. roſæ, in preference to the bark. I met with no caſe which proved fatal, excepting two old men, who had neglected themſelves in the beginning, and one of them had been, for many years paſt, extremely afflicted with aſthma. Relapſes did not appear to me to be common. Males and females, as far as I could judge, were equally ſubject to the diſeaſe; it occurred leſs frequently in young ſubjects, they were, however, not exempt from it, and I have met with it in infants. With regard to the Influenza being contagious, I am ſtrongly inclined to think it is not. During the time the Influenza prevailed, the weather became much

warmer

warmer for a few days; the diſeaſe, however, did not appear to be checked or rendered milder in conſequence, but on the contrary, vomiting during that time occurred more frequently. I do not learn that any epizootic diſeaſe prevailed particularly at that time.

ARTICLE LXXIX.

From LEONARD GILLESPIE, M.D. London.

JUNE 20, 1803.

An epidemical catarrhal fever, or true Influenza, made its appearance at Fort Royal and St. Pierre's, Martinique, about the middle of July 1802, affecting a great number of persons and whole families: it was supposed by the inhabitants to be the forerunner of many other expected plagues, transported by their countrymen in a French corvette, arrived from France about this time; but this supposition seems altogether as fanciful as the name which was given it, that of "Le Chapeau quarré," (or the cocked hat,) from the hats worn by the French officers and soldiers, whom the people unjustly charged with having imported this disease.

This complaint appeared to have arrived at its greatest height about the middle of August, and

and had pretty well diſappeared about the autumnal equinox.

The ſymptoms of this diſeaſe were generally diſcoloration, dejection of ſpirits, laſſitude, head-ach, dry cough, hoarſeneſs, oppreſſion at the breaſt, and ſlight dyſpnœa: in the afternoon fever, preceded by ſlight chills, generally came on, which remitted towards morning with diaphoreſis; returning daily from three to ſeven days. In ſome patients, particularly in thoſe of a phthiſical habit, pleuritic ſtitches occurred; whilſt in perſons having weak bowels, particularly in children, and ſcorbutics, the catarrhal diſeaſe evidently attacked the inteſtines, exciting gripes, teneſmus, and looſe mucous ſtools.

It proved fatal excluſively, as far as my own experience goes, only to patients who had previouſly been affected with incipient or confirmed phthiſis pulmonalis.

Women and children were more liable to be affected with this Influenza than adult males, yet of about five hundred priſoners of war, confined in ſhips, at leaſt one half of the number were affected with the com-

 plaint,

plaint, 70 or 80 of them labouring under it at the same time; a circumstance which sufficiently indicated that this disease was infectious.

The most simple mode of treatment was found to be the most successful. Blood letting was rarely indicated, and in some cases was found hurtful. Emetics in full doses were not indicated; but antimonials in small and repeated doses, as the pulvis antimonialis, vinum antimonii or kermes mineral, were found serviceable, as expectorants and diaphoretics; guarding against the exciting of a diarrhœa by their use. Purgatives required great caution in their administration; when costiveness was present, emollient oily enemas, and oleum ricini, given in the form of a linctus (in which way it is often used with benefit in the West India Islands) were had recourse to with advantage. Blisters were sometimes used with good effects, as were large plasters of pix Burgundica applied to the breast or back.

Oily and mucilaginous pectorals, gentle anodynes, diaphoretic and pectoral beverages, and

and pediluvia, (or warm bath in the remiſſion of fever,) were all occaſionally had recourſe to with good effects.

When the catarrhal defluxion affected the bowels, after a ſmall doſe of the vinum ipecacuanhæ, or of rhubarb, followed by an opiate, the columbo root with a mucilaginous diet, and ſmall doſes of ipecacuanha with opium were found ſerviceable.

As in the iſland of Martinique every febrile diſeaſe, particularly during the rainy ſeaſon, is liable to aſſume the type of a remittent or intermittent fever, ſo in this epidemic, that occurrence frequently was obſerved; when the adminiſtration of the infuſion of the cortex cinchonæ or auguſturæ in cold water was given with good effects, taking care that expectoration was not checked too much by the medicines; for,

The natural termination of this diſeaſe was by a critical evacuation by diaphoreſis and expectoration, and every medicine which counteracted theſe ſalutary excretions, appeared to do harm.

This Influenza was the precurſor of the malignant yellow fever, or more properly

ardent fever, the caufos of Hippocrates, which, commencing in the beginning of September, amongft the French feamen and foldiers lately arrived from France, committed the moft frightful devaftations amongft them; infomuch that out of 2500 veterans landed in September in Martinique, only 300 are faid to have remained in life at the latter end of December.

Meteorological phænomena appeared to be connected with this epidemic, and that which fucceeded to it. From the beginning of May, the time at which the fun paffes the zenith of Martinique, the weather became unufually rainy, fqually and unfettled, with very fevere and frequent thunder ftorms; whilft the wind hung very much in the fouth-eaft quarter; nor were thefe the only appearances denoting the fuperabundance of the electric fluid in the atmofphere, frequent and ftrong fhocks of earthquakes, particularly at the periods of the full moons of the 15th of June, and of the fame date in July, accompanied by an unufual height of the tides, demonftrated, in a very awful manner, this powerful agency.

ARTICLE LXXX.

Further Account of the lithontriptic Power of the muriatic Acid, as obſerved by Mr. Peter Copland, in Lithiaſis, and Icterus calculoſus.—Extracted from a Paper, dated Swayfield, December 1800; read before the Society in March 1801.

The author, at a former period *, had already favoured the Society with a paper, containing four caſes on the ſubject of the preſent communication, which was publiſhed in the Society's Memoirs. He now informs us that he has continued to uſe, with ſucceſs, the muriatic acid in calculous complaints, and relates ſeventeen illuſtrative caſes, in addition to thoſe juſt mentioned, theſe caſes affording reſults which correſpond entirely with thoſe of his former experiments. It has not been

* See Memoirs of the Medical Society of London, Vol. V. p. 71.

thought

thought neceſſary to publiſh them at full length, but the Society has deſired that a ſummary account of them ſhould be inſerted in the preſent publication.

The doſe of acid uſed by Mr. Copland is from 30 to 50 drops, three times a-day. The conſtant and uniform effect of this medicine, after a few doſes, is ſtated to be the appearance of a conſiderable quantity of calculous ſediment in the urine. This ſediment is deſcribed as conſiſting, in almoſt every inſtance, of *red ſand*, the nature of which does not appear to have been chemically examined by the author. In a few caſes, however, there ſeems to have been alſo a diſcharge of light-coloured calculous matter; and in one inſtance, two-aſh coloured concretions, weighing ſix grains, were found in the urine.

The general conſequence of this diſcharge appeared to be a conſiderable relief of all the ſymptoms, and, in by far the greateſt number of the caſes related, a permanent cure was ſuppoſed to have been effected. In no inſtance, however, was the preſence of a ſtone in the bladder aſcertained by examination previous to the exhibition of the acid, but

from

from the quantity of calculous ſediment obtained by the uſe of this medicine, amounting in one caſe to 110 grains, and in ſeveral to nearly as much, no doubt can be entertained as to the nature of the complaint. As a proof that this depoſition was not afforded immediately from the urine, the author relates a caſe, ſuppoſed to be calculous, in which eleven ounces of the acid were taken, in doſes of 60 drops, three times a-day, without producing the leaſt ſediment in the urine; and it was afterwards proved that the complaint had been miſtaken, and that there had been no ſtone in the bladder.

After the author's great ſucceſs with the acid in lithiaſis, he was led to try its effects in Icterus calculoſus, and relates three caſes in which he has every reaſon to ſuppoſe that this medicine had the deſired effect, but confeſſes that the event of ſo few caſes is not ſufficient to enable him to draw any poſitive concluſion with regard to the laſt diſeaſe, although he conſiders it as well worth the attention of practitioners.

ARTICLE LXXXI.

Sketch of a new Theory of the Cow-pock, with Remarks on contagious Diſorders.

By JAMES SIMS, M.D. and L L.D., Preſident of the Medical Society of London, V.P. of the Philanthropic and Horticultural Societies, F.A.S., and R. Ir. Ac., Hon. F. of the New York, Maſſach. Richm. and Avignon Med. Soc. &c.

At a time when ſo many doubts concerning the efficacy of vaccine inoculation, for the prevention of the ſmall-pox, have been moſt induſtriouſly diſſeminated, it becomes the duty of every perſon, who thinks he can in any wiſe do away the ſeemingly increaſing prejudices againſt that practice, to ſtep forward in a matter ſo nearly concerning the whole human race.

Previous, however, to what I ſhall advance on this particular ſubject, I beg leave to ſay a few words declaratory of my general opinions concerning contagious diſorders.

I have

I have often thought that in explaining the operations of our frame, we have made too little uſe of the doctrine of fermentation. There ſeems to be a regular progreſſion through all nature, from the minuteſt proceſs of inanimate matter to the higheſt one in the animal frame. The genera of fermentation in liquids, which were formerly confined to three, are now beginning to be enlarged by chemiſts, and may we not ſuppoſe that there exiſt many ſpecies of each? Might not an ingenious theoriſt ſhew, that vegetation is entirely a fermentative proceſs, occaſioned by ſolar heat, and that the different ſpecies of vegetables are owing to different ſpecies of it? Still carrying on the chain of reaſoning, do we not ſee in the animal, and particularly in the human frame, the progreſs of fermentation diſtinctly pointed out? A little of the matter of any of the contagious diſorders is inſerted into the body, and that diſorder is produced and no other; and as in the fermentation of liquids, after the proceſs has been gone through, it is impoſſible to excite the ſame kind of fermentation again in the ſame materials, even by the addition of a ferment,

ferment, ſo, after the infectious diſeaſe has ſubſided, the frame becomes incapable of it again. Is not this a plain reaſon for our not being liable to the ſmall-pox, and other contagious diſeaſes, conſtitutionally, a ſecond time?

I have only mentioned this inſtance of fermentation in animals, but might I not go much farther, and ſay, that they, as well as vegetables, are intirely the products of fermentation occaſioned by heat?

Whilſt a ſtudent at College I maintained in a Medical Society, an opinion that all contagious eruptive diſeaſes were communicated to mankind from other animals, among a particular ſpecies of which each particular diſeaſe might be ſaid to be epizootic.

In 1764, when I began the practice of phyſic, my thoughts were greatly employed upon inoculation of the ſmall pox. The Suttonian method coming into vogue about that time, greatly arreſted my attention, and as many points reſpecting it were kept ſecret, my mind was naturally much occupied with inveſtigating the circumſtances which gave it celebrity. Among other things which occurred to me, I imagined that a proper dilu-

tion

tion of the virus before inſertion, might tend to render the diſeaſe milder. With this view I tried a number of fluids, moſtly bland ones, but muſt acknowledge that I totally failed in my intention, the only difference which I could perceive being that the certainty of infection was much leſſened, whilſt the diſeaſe was not obviouſly mitigated.

I mention this and the former opinions, not with any deſign to take up the time of the Society with their inveſtigation at preſent, but to lead the way to ſome farther ones, which I mean to throw out in the briefeſt manner, hoping in future to render them more than probable conjectures, when I ſhall endeavour to fill up the outline here ſketched in a more extended work.

Although what I have ſtated as to fermentation, may ſhew why the ſyſtem having been conſtitutionally affected by the ſmall-pox, becomes incapable of receiving the ſame diſorder a ſecond time, yet it will not ſhew why the cow-pox ſhould become an antidote to the ſmall-pox; but if we ſuppoſe that the human frame is capable of giving infectious diſorders to other animals, as well as receiving them

them from them, a thing requiring little proof, we may eaſily ſolve the difficulty. It is only ſuppoſing, what I have no doubt of being true, that the cow-pock is nothing more than the ſmall-pox tranſplanted from man to the cow, by means of the infected hands of thoſe who milk them, and that in paſſing through the frame of that animal, it is diluted and made milder for its re-inſertion into the human frame.

The proof of the cow-pock being only the ſmall-pox transferred to the cow, may be obtained by inoculating that animal by friction on a ſore teat, or by the lancet from the ſmall-pox, in a human ſubject. We might, perhaps, fail in the firſt attempts, but this ſhould not diſcourage us, as the final ſucceſs would ſo nobly repay the trouble by extending our knowledge of nature in ſo beneficial a manner to the human race.

As I mean this only as a ſketch of what I have to ſay on this ſubject, ſuch only being adapted to your publication, I ſhall conclude with two remarks.

Had the cow-pock been at firſt ſuppoſed to ariſe from the ſmall-pox, inſtead of the greaſe in a horſe's heel, all the doubts concerning its efficacy as a preventive of the ſmall-pox

pox would either never have exiſted, or been done away long ere this: we ſhould likewiſe have heard nothing of the wild ſuggeſtions of its being a beſtial diſeaſe, nor the malignant ſenſeleſs ones of its being ſcrophula. Would not the practitioner eſſentially ſerve both himſelf and mankind at large, who, by inoculating a cow with the ſmall pox, ſhould afterwards by reinoculation from her produce the mitigated diſeaſe called the cow-pock in the human frame? The moſt ſceptical and timorous part of the public would have recourſe to him, in preference to all other vaccinators.

A ſecond remark is, that we ſee by this a probable mode of mitigating the plague, yellow fever, and other ſcourges of the human race; not by inoculating them from one man into another, but by making them paſs, by inſertion, through the bodies of various animals, until we diſcover the one that will render them ſufficiently mild to the human race.

ARTICLE LXXXII.

À la Societé de Médecine à Londres.

Sa Majeſté le Roi de Pruſſe notre trés gracieux Souverain nous ayant ordonné du publier un conſpectus concernant un prix qu'il deſtine à celui qui ſatisfera de la manière la plus complette aux queſtions ènoncées dans celui, que nous avons l'honneur de vous envoyer ci-joint, nous vous prions de vouloir bien lui procurer toute la publicité que vous pourrés, et nous vous aſſûrons d'avance de notre reconnoiſſance, et du plaiſir que nous trouverons dans toute occaſion de vous donner des preuves de la haute conſideration, dont nous vous prions d'agréer les expreſſions.

Berlin le 22me May 1805.

Le Collège ſuperieur de Médicine et de Santé de ſa Majeſté le Roi de Pruſſe.

CONSPECTUS

Quæſtionis, a Collegio ſupremo medico Berolinenſi, modum contagii febris ſic dictæ flavæ ſpectantis, propoſitæ.

Febrem flavam illis jure adnumerari morbis, quibus peculiare eſt, ab ægris ad ſanos ope contagii transferri, experientia ſat ſuperque edocti fuimus.

Patet inde, contagioſum virus huic morbo proprium exiſtere, quod ex illo gignitur, et cauſam propagationis illius continet.

Quo vero modo contagium proſeminetur nobis attamen hactenus non ſatis innotuit, ſed ita latet, ut in dubio hæreamus; an ægrorum contactus ſolus contagionem febris flavæ producat? vel an virus per atmoſpheram transferatur, et tali modo ſanos contaminare valeat? vel tandem: an miaſma febris flavæ, peſtis miaſmatis ad inſtar, corporibus omnigenis adhæreat, et illos ita inficiat, ut eorum

contrectatio ad producendum morbum istum contagiosum, sufficiat?

Ultimum hocce problema solvere et dubiam difficultatem evidenter enodare, ideo maximi est momenti, quia cautelarum ad avertendam contagionem et compedum commercio imponendarum selectus, præcipue ab hac pendet explicatione.

Hactenus in enucleanda hac quæstione, medici attentionem ac solertiam non sufficienter adhibuisse videntur, et hinc potentissimus Borussorum rex consultum duxit, Collegio medico supremo Berolinensi injungere, ut viris arte peritis, quibus non defuit occasio epidemiam febris flavæ observandi ac e propinquo contemplandi, prœmium offerret ac proponeret circa hanc adhuc dubiam materiam; quo ad perscrutandas et illustrandas quæstiones propositas adducerentur, ita ut illorum labore, repetitisque experimentis, ac factorum sedula investigatione, dubia hac de re in futurum prorsus evanescant.

Hoc jussu, supremum Collegium medicum Borussicum, artis peritos quibus hac de re observationes instituere et experimenta facere licuit, ut huic labori operam navent, rogat ac invitat.

I. Dan-

I.

Danturne facta minime dubia, et experimenta fide digna, quibus concludere liceat, miaſma febris ſic dictæ flavæ, corporibus exanimis et ſubſtantiis omnigenis ita inhærere poſſe, ut eo contagium hominibus communicari poſſit, qui contactui vel contrectationi eorum ſeſe exponunt? Poteſtne ergo eo effici ut contagium febris iſtius hac via ad regiones longinquas transferatur, et exitioſum ibi producat morbum?

II.

Si hic propagationis ac contagii modus admittitur; quæritur: quænam ſint vel facta vel experimenta quibus hæc opinio veroſimilis aut certa reddatur? In caſu vero oppoſito, opinio contraria rationibus ac factis itidem confirmanda erit.

III.

Licetne ut rem veroſimilem, immo fide dignam admittere, vel abſque dubio confirmare, quod virus quo febris flava proſeminatur productum ac progeneratio ipſius morbi ſit? Inhæretne

hoc miaſma peculiariter uni vel alteri excreto animali et cuinam ?

IV.

Patetne adeo natura et chemica mixtio hujus miaſmatis, ſic ut ex hac notione antidotum qualecunque, vel agens chemicum ad ſubigendum vel extinguendum virus non impar innoteſcat ? Danturne alia prophylactica remedia contra hanc infectionem ? Quænam ſunt illa ? ſuntne in eorum numero quædam, quorum virtus efficax manifeſta ac comprobata ſit ? quonam utendum eſt methodo ut illorum ope ſubſtantiæ contaminatæ et inquinatæ hoc miaſmate plenarie et ita liberentur, ut contagionem porro inferre et morbi exitioſi ſemina propagare non amplius valeant ?

V.

Licetne temporis ſpatium ſtatuere, ultrà quod, virus hocce virtutem ſuam contagioſam et proprietates ſuas nocivas, exſerere nequeat ? Daturne præfinitum tempus, quo elapſo, ſubſtantiæ inquinatæ ad propagandum morbum non amplius idoneæ ſunt et quo præterito

 conta-

contagium, ut penitus extinctum haberi possit?

VI.

Licetne discrimen inter corpora ad suscipiendum virus apta stabilire et inter illa differentiam admittere prout majorem vel minorem proclivitatem exserunt ad suscipiendum aut ad conservandum aut in sinu suo fovendum hoc miasma? Exstantne corpora facultate miasma hocce suscipiendi omnino expertia, dum alia huic exitiosæ impraegnationi facillime subjiciuntur et quænam sunt utraque?

(Hic tabula præcipuarum mercium subjungenda foret, in qua, respectu hujus quæstionis, hæ merces in diversas classes distribuendae essent.)

VII.

Quæritur porro: an morbus, qui sub nomine febris flavæ in America septentrionali et ad littora maritima Hispaniæ nec non Ligurni grassatus est, unus idemque ubicunque fuerit morbus? an vero pro regionum diversitate, discrimen qualecunque quo ad ortum, decursum et symptomata morbi, cladem quam

ſparſit et contagionis progreſſus, ſtatuere liceat? ac quibuſnam argumentis ſtabiliri hæc opinio poteſt?

VIII.

Eſtne denique febris flava morbus endemicus littoris? aut licuitne illum procul ab oris maritimis obſervare? videturne hæc diſtantia a mare in morbi decurſu ejuſque propagatione aliquid immutaſſe?

Potentiſſimi Boruſſorum regis juſſu præmium

Ducentorum ducatorum aureorum

illi pollicemur, qui quæſtionibus propoſitis apprime reſpondebit, dubia illuſtrabit, ac experimenta ſua factis indubitatis fulcire conatus erit.

Ad victorem propius accedenti

Centum ducati aurei

prœmio erunt.

Commentationes latino, gallico, vel germanico idiomate diſtincte conſcriptæ et ſequente inſcriptione munitæ:

(Au Collège ſupérieur de médecine et de ſanté de ſa Majeſté le Roi de Pruſſe, à Berlin)

ante

ante calendas Januarii 1807 tranſmitti debent. Tardius venientes a certamine excludentur.

Auctores invitantur ut quiſque nomen, munus et domicilium ſuum ſchedula ſigillo obſignata includant, ſimulque hanc ſchedulam extrinſecus inſcriptione qualibet inſigniant quæ eadem eſſe debet ac in fronte libelli. Collegium medicum ſupremum Boruſſicum de acceptis elaborationibus æquiſſimum faciet judicium, illique palmam decernet, quæ facta extra omnem dubitationis aleam poſita ſimulque enodationes utiliores complectetur.

Propius accedenti ſecundum adjudicabitur prœmium. Schedulæ ſignatæ nomina aliorum competitorum continentes, illæſis ſigillis, comburentur.

Berolini die 17. Aprilis anni 1805.
Collegium ſupremum medicum et ſanitatis Boruſſicum.

ARTICLE LXXXIII.

Medical Society of London.

To encourage the ſending valuable papers to this Society, the Preſident propoſes to give the following Medals at the Anniverſary in March, to be adjudged by the Council.

Firſt, A gold medal, for the beſt diſſertation on any ſubject in Medicine, Surgery, Pharmacy, Midwifery, Anatomy, Chemiſtry, or Natural Hiſtory, written by a Fellow of the Society.

Second, A gold medal, for the beſt diſſertation on any of the before-mentioned ſubjects, written by any perſon, except a Fellow of the Society.

Third, ſilver medals, for the beſt diſſertations on any of the before-mentioned ſubjects, whether written by fellows of the Society, or others, which may be thought by the Council to merit them.

The papers for theſe Medals muſt be delivered to the Medical Society, at their houſe in Bolt Court, Fleet-Street, before the 1ſt day of January.

M. F. WAGSTAFFE, Regiſter.

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MEDICAL SOCIETY OF LONDON,

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